INDIAN KNOWLEDGE SYSTEM AND SUSTAINABILITY: ROOTING MODERN SOLUTIONS IN TRADITIONAL WISDOM

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ABSTRACT

Traditionally, India's traditional knowledge systems have always woven sustainability into them, and how communities have interacted with nature and how they have used resources and built their lives has been based on this sustainability. For centuries, ecological balance and resource and energy efficiency have been supported through indigenous practices such as step-wells for water conservation, organic farming methods, and Ayurveda-based health care. Now, however, industrialization and globalization have run so fast that almost all these proven approaches are pushed to the margin. The study argues that India's traditional knowledge can be used as the basis of sustainability, but it uses bibliometric analysis to identify research trends and gaps. This study is undertaken through a qualitative approach, although it reviews the literature based on the data from Scopus and conducts bibliometric analysis for the research fields of IKS and sustainability. The study then shows that many of India's traditional practices are nearly identical to modern sustainability goals. These focus on Zero Budget Natural Farming and sustainably produced textiles using natural dyes, as well as climate-responsive vernacular architecture, resource and low carbon footprints, and community-led conservation. However, given industrialization's erosion of the indigenous knowledge systems and the absence of formal documentation, it is difficult to revive them on a large scale. Additionally, modern sustainability policies often favor traditional, nature-based approaches and delay their uptake in more mainstream sustainability policies.

Keywords: Indian Knowledge System, Sustainability, Traditional Wisdom, Resource Efficiency.

INTRODUCTION

1.1 Background of the Study

What is required to live a healthy and happy life? The answer often lies in maintaining

harmony with nature, a principle deeply embedded in ancient Indian knowledge systems. In today's world, environmental concerns should be the most essential concern for every human. For the survival of our coming generations, the conversation around sustainability has become more urgent than ever. "Sustainability" is a broad concept that weaves together environmental, economic, and social aspects, each with its own priorities, measures, and objectives to create a balanced and thriving future (Purvis et al., 2019). As climate change poses serious challenges in the 21st century, "environmental sustainability" has become more crucial than ever, sparking global discussions and efforts toward a greener future (Özkan et al., 2025). People in developing regions have long relied on their Indigenous Knowledge Systems (IKSs), a blend of cultural, traditional, and local wisdom unique to their communities, to adapt to climate change (Ubisi et al., 2020). They are also specialized knowledge systems (as in specialized skills and technologies) informed by traditional methods of production and consumption and provide practical and sustainable solutions (Kanchebe Derbile, 2013). Sustainability has always been a part of India's way of life and nurturing all. Reconnecting to our rich knowledge heritage helps us present time-tested solutions with valuable lessons for the world (Ministry of Education, Government of India, 2023). Although contemporary practices such as financial inclusion seek to designate and give power to underserved groups and make them official, aligning them with the ethos of making it accessible, trusted, and community-oriented experiences based on Indian Knowledge Systems can present an ethically more fulfilling and sustainable experience (Bhatia, 2023). Finding affinities between the Indian Knowledge System and the contemporary concepts of sustainability, which are rooted in the philosophies of balance, harmony, and coexistence, it is reasonable to mention popular scholarly fascination with the direction of merging the knowledge of traditional wisdom with the ideas of innovative sustainable development patterns (Savita & Bhardwaj, 2024).

The mysteries of existence and the source of life by the main elements are the most important objects of the spiritual and philosophical teachings of the ancient Vedic tradition (Škof, 2021). These writings are called the Vedas, which currently are some of the oldest known texts in human history, form the earliest Sanskrit literature, and fashion the fundamentals through which all that develops into Hindu traditions evolves (Burgess, 2018). Vedic philosophy stems from the ancient scriptures and traditions to perceive life and nature as one unit, and hence the practice of harmony towards the environment (Kanojia, 2024). "Dharma and IKS integration in education promotes holistic development and produces individuals who are intellectually capable, but not only, as they are ethically and morally grounded." Globally, the Foundations curriculum holds a guiding principle that a strong foundation in Dharma is a strong guiding principle to life that helps learners navigate modern challenges and remain rooted in the timeless (Isser, Estevez, Paulson, Chang, & Chipwo, 2024). So, "sthitaprajnasamadhistha" is a state of perfectly

liberated wisdom and perfect meditation that leads one away from suffering to lasting inner peace and happiness (Subramaniam, 2024). Dharma and karma originate from the Divine, and the fruits arise from one's actions (Can, 2015), but Dharma and karma are good karma, which bestows positive results, and bad karma, which is the opposite and brings negative outcomes. According to the teachings of Vedic philosophy, heartfelt actions offer leading results; advocating minimalism, cooperation, and harmony with nature, but true prosperity is not in wealth in business but outside of it (Sharma & Talwar, 2005).

1.2 Research Objective

This study examines how India's traditional knowledge supports sustainability, using bibliometric analysis to identify research trends and gaps.

1.3 Research Questions

RQ1: To identify the most influential authors, papers, and sources in the field of Indian knowledge system perspectives and sustainability.
RQ2: To identify the key research themes and topics in the field of Indian knowledge system perspectives and sustainability.

LITERATURE REVIEW

2.1 Sustainability Through the Lens of Indian Traditional Knowledge

Indian civilization has sparked with balance, simplicity, and a proper connection with nature for generations (Kumari, 2024). The land, water, and traditions that our ancestors used were used with care so that the resources would survive for future generations (Biswas, 2024). From farming, architecture, and water management to healthcare, sustainability has been integrated into everyday life (Sharma, 2023). Facing issues such as "climate change, pollution, and dwindling resources," it may be useful to turn to these ancient practices and take inspiration from them so that a logical and sustainable solution, based on culture, is present (Kumari, 2024).
It is no longer a mere task of a day; it is a question of necessity to preserve traditional knowledge to make those traditional skills applicable to the living world. If the ancient wisdom blends with more advanced technology, for example, by using AI to become more proficient at water management or by allowing for the revival of traditional farming on a larger scale (Malik, 2024; Singh, 2024), then we can forge a future that is sustainable and yet very connected with the cultural roots of ourselves.

2.2 Reviving Traditional Knowledge for Sustainable Development

The revival of traditional knowledge systems necessitates a multi-pronged approach involving policy interventions, community participation, and educational initiatives (Malapane et al., 2024). Policies promoting agroecology, community-based resource management, and the protection of sacred landscapes can provide a supportive

framework for traditional practices (Osei et al., 2024). These match the practices of modern sustainable development and, in particular, the United Nations' Sustainable Development Goals (SDGs) (United Nations, 2015). However, traditional knowledge systems in India are facing many hurdles. The decline of Indigenous knowledge results from globalization, urbanization, and the erosion of cultural praxis (Gadgil & Guha, 1992). India's traditional practices, as a case in point, are examples of lessons on resilience, flexibility, and community-centricity in development in the context of global sustainability efforts. Several of these practices also fall in line with the SDGs (specifically SDG 6 (Clean Water and Sanitation); SDG 12 (Responsible Consumption and Production); and SDG 13 (Climate Action)) (United Nations, 2015). The combination of traditional knowledge and modern scientific techniques may produce new solutions to urgent environmental and social problems.

2.3 Rationale of the Study

- As far as 'sustainability' is concerned, India's 'traditional knowledge system' has had much to offer in farming, water conservation, and resource management.
- With our age-old wisdom and modern advancements like green technology and AI, we can come up with more effective and sustainable solutions.
- Research shows that Indigenous knowledge is often either ignored or not included in global sustainability discussions, and it should be brought into such conversations.
- One way of doing this is by revisiting and adapting India's ancient practices to create practical, scalable, and culturally meaningful interventions for the environmental challenges of today.

RESEARCH METHODOLOGY

Research methodology involves systematically designing, conducting, and analyzing a study. This study applies a small part of bibliometric analysis with a review framework to quantitatively assess research data. Bibliometric analysis, first introduced by Pritchard in 1969, has gained prominence as a method for measuring and evaluating academic literature (Donthu et al., 2021). Recently, bibliometric analysis has become popular in many domains (Arici et al., 2019; Kaur & Singh, 2023). This increasing awareness among scholars may be due to its appropriateness for scientific mapping (Aria & Cuccurullo, 2017).

- Literature Search and Data

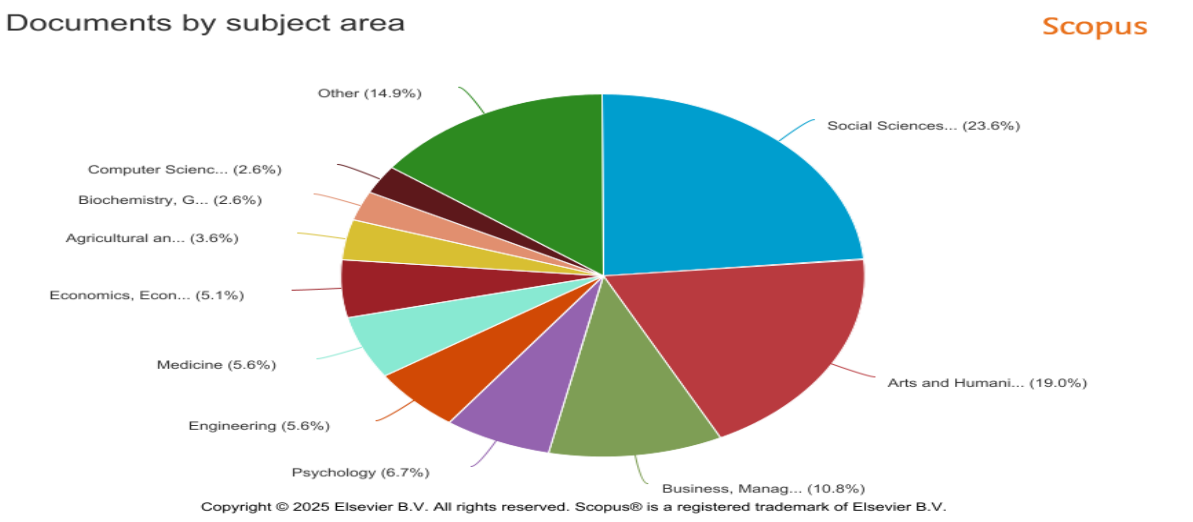
Collection

The Scopus database is used for bibliometric analysis of research trends because researchers consider it a vast and robust database. Keywords used for document search: "Indian knowledge system" OR "Vedic philosophy" OR "Traditional Indian Knowledge" OR "Ancient Indian Wisdom" OR "Indigenous Indian Knowledge." After searching these terms, the

Scopus database shows 106 documents. After that, the filters of subject area and English language were applied (Business, Management and Accounting, Economics, Econometrics and Finance, Decision Science). Then, the final study includes 26 documents.

The subject-wise distribution of the data is represented with the help of Figure 1.

Figure 1: Documents by Subject Area

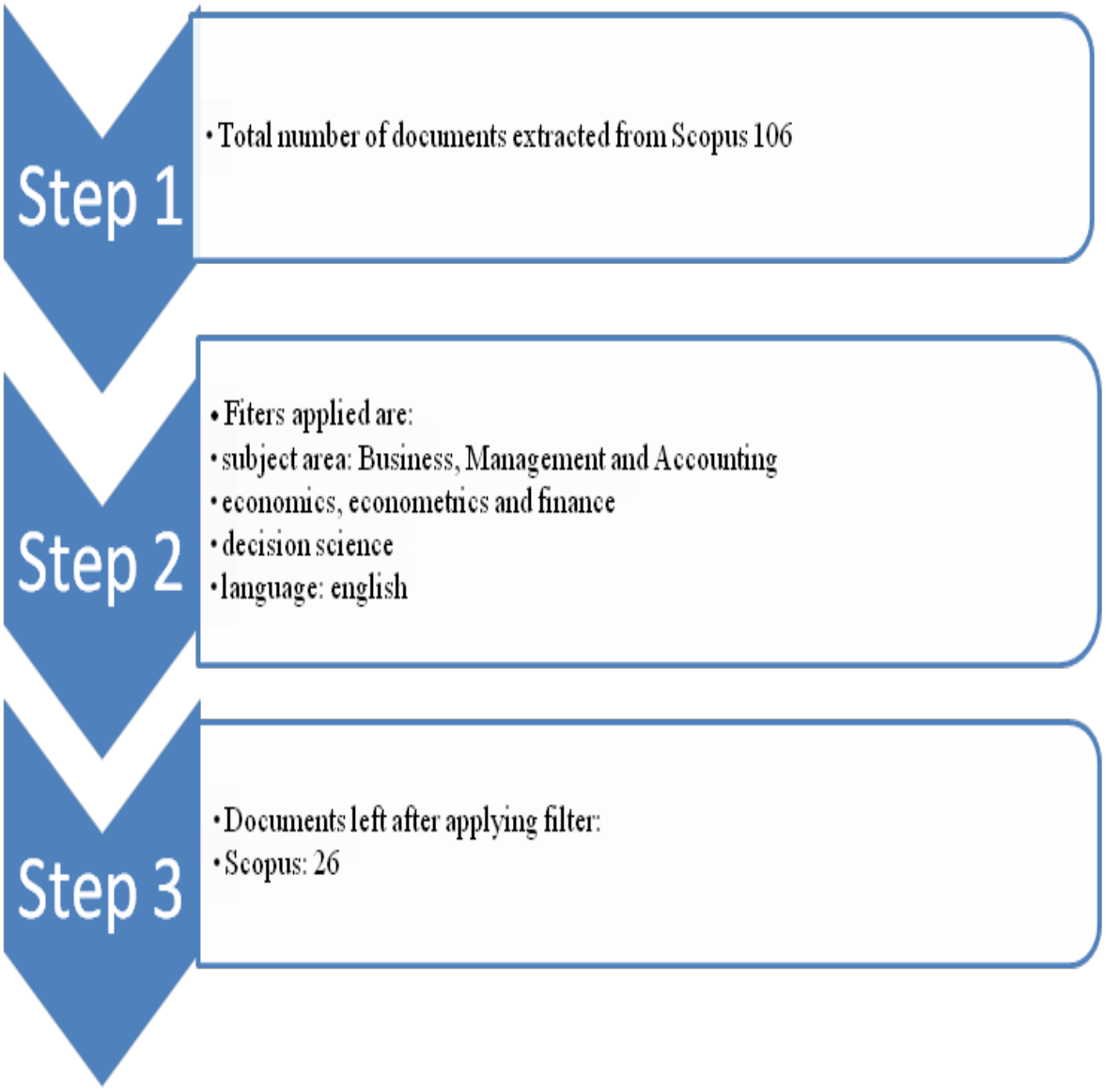


Source: Scopus

From Figure 1, it is interpreted that research in "humanities and social sciences" takes the lead, with a strong focus on topics related to "society, culture, and human behavior." Fields like "business, psychology, engineering, and medicine" also have a solid presence, reflecting the growing interest in applied sciences and technology-driven solutions. On the other hand, areas like "computer science, biochemistry, and agricultural sciences" have a smaller share, possibly because much of their research is published in specialized journals. The chart highlights the broad and diverse nature of academic research, showing that social sciences dominate the area. However, there is still a steady contribution from scientific and technical fields. This suggests an increasing need for collaboration across disciplines to address real-world challenges effectively.

The data-gathering process is explained with the help of Figure 2.

Figure 2: The Process of Collecting and Filtering the Data



Source: Author Creation

3.2 Data Extraction, Loading, and Conversion

After applying the inclusion and exclusion criteria, a total of 26 publications were collected. The data were exported for analysis. We entered the data into Biblioshiny by first exporting CSV and BibTex file formats.

3.3 Bibliometric Analysis and Software Package

This is a quantitative research program that offers a wide choice of tools for conducting quantitative research. The analysis is done using the open-source Bibliometrix R package (Aria and Cuccurullo, 2017). The authors of the R package also wrote it in the R programming language. The algorithms for statistical and scientific mapping analysis are contained within it. The latest versions of the bibliometrics R package (2.0 and above) include a web interface software also called Biblioshiny that helps non-programmers perform bibliometric analysis. BibTex, CSV, or Plain Text formats can be imported onto the Biblioshiny interface from databases such as Web of Science or Scopus (Agbo et al., 2021).

RESULT

4.1 Main Information

Table 1: Main Information

Description	Results
MAIN INFORMATION ABOUT DATA	
Timespan	2005:2025
Sources (Journals, Books, etc)	21
Documents	26
Annual Growth Rate %	0
Document Average Age	6.88
Average citations per doc	5.846
References	670
DOCUMENT CONTENTS	
Keywords Plus (ID)	45
Author's Keywords (DE)	82
AUTHORS	
Authors	47
Authors of single-authored docs	7
AUTHORS COLLABORATION	
Single-authored docs	7
Co-Authors per Doc	1.92
International co-authorships %	7.692
DOCUMENT TYPES	

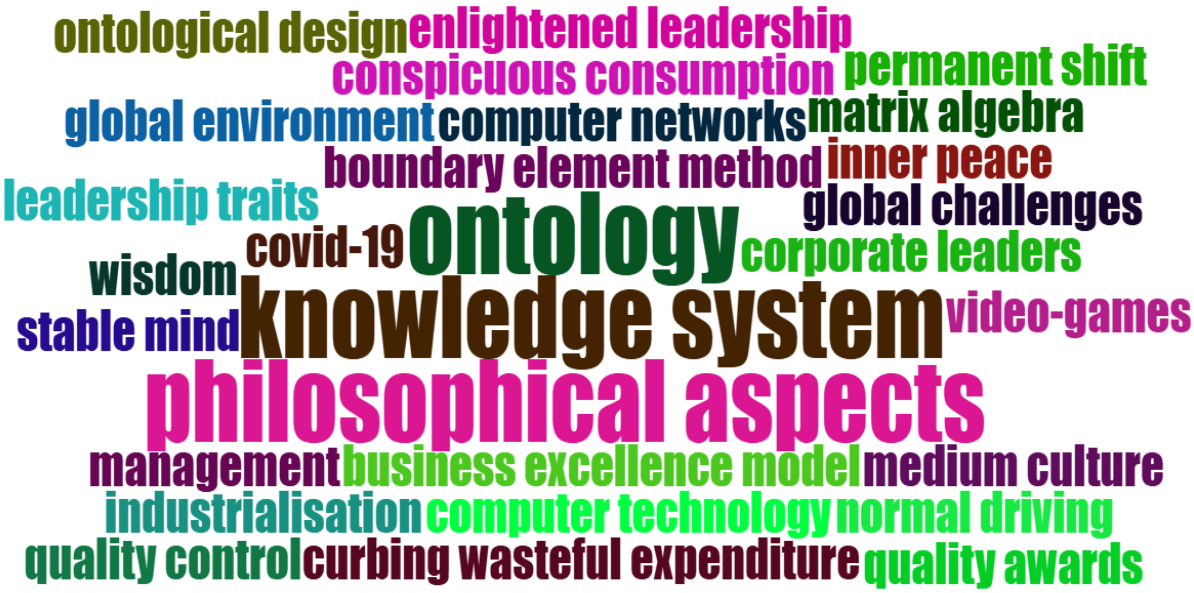
article	11
book	2
book chapter	6
conference paper	2
letter	1
note	1
review	3

Source: biblioshiny

Table 1 offers a rich bibliometric profile of a collection of 26 academic documents that were contained in the timeframe between 2005 and 2025. This 20-year period encapsulates several sources in journals, books, book chapters, conference papers, letters, notes, and reviews, showing a multidisciplinary, multi-format body of literature. The year-on-year rate is 0%, and this shows that there has been no major change in the publication trend in this field, showing some variation in output. The body of work is very recent, with a mean draft age of 6.88 years, meaning that relevance is maintained, but there has not been a great deal of rapid growth. Mean citations per document and total references (670) indicate a moderate scholarly impact and engagement, and, by extension, the hypothesis that the overall field was mentioned but not yet in a big way. The analysis of the content shows 45 Keywords Plus (ID) and 82 Author Keywords (DE), which indicate the thematic abundance and variety of directions set by the authors themselves. Authorship-wise, it has 47 contributing writers with 7 single-authored papers, highlighting a proper extent of individual contribution. Nevertheless, the collaborative level is moderate, as the co-authors of the documents per document ratio is 1.92. The international rate of co-authorship is quite low, with its value equal to 7.692 percent, signaling low cross-border research cooperation, which can be indicative of a more geographically or nationally oriented field. With respect to the types of documents, journal articles dominate (11), followed by book chapters (6) and books (2), indicating both empirical and theoretical contributions. The contributions of conference papers (2) and reviews (3) suggest not only the dissemination and sharing of current research but also the synthesis of already published material. All in all, the dataset demonstrates a niche but growing research domain, with balanced content types, moderate rates of collaboration, and steady but not high rates of growth.

4.2 Word Cloud

Figure 3: Word cloud



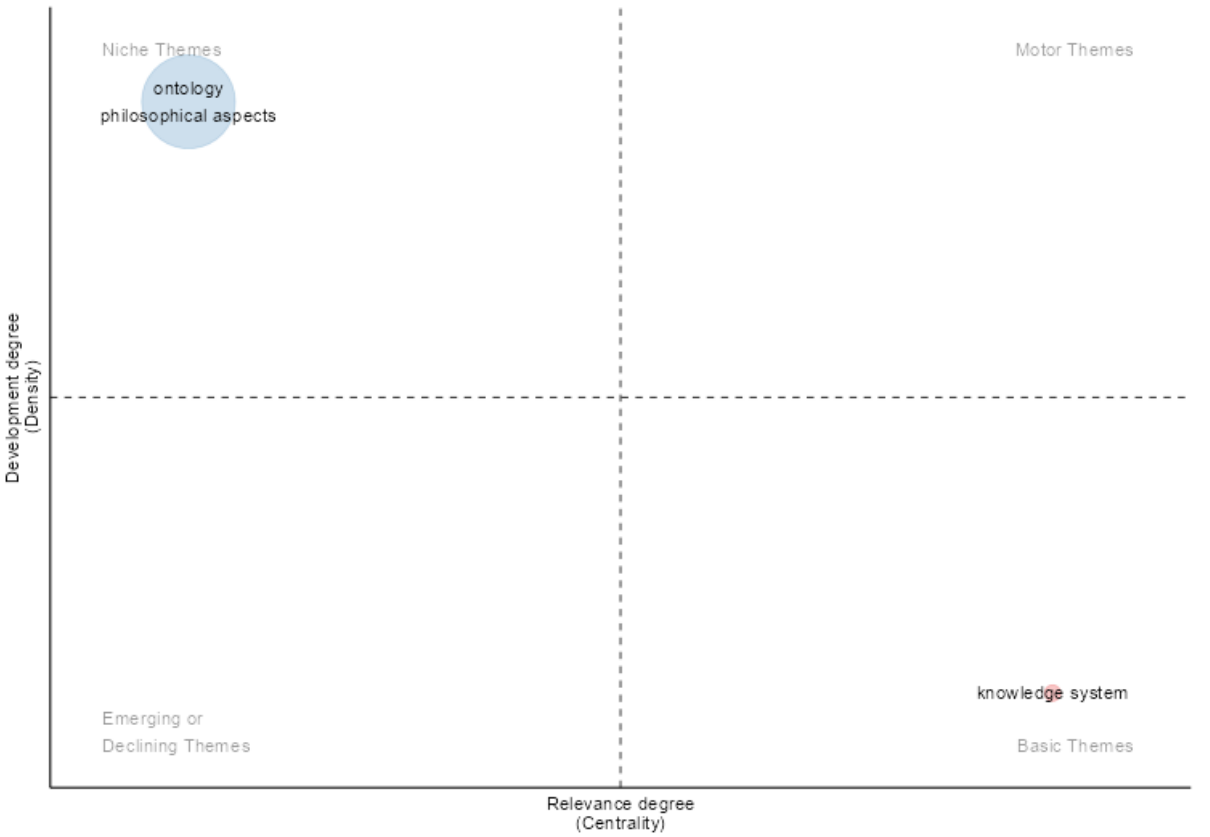
Source: biblioshiny

Figure 3 shows that a substitute area of key themes concerning the idea of knowledge systems is illustrated throughout the word cloud, illustrating a multidisciplinary blend of philosophy, technology, management, and social aspects. Terms such as knowledge system, philosophical aspects, and ontology are all dominant terms, meaning that the focus point was heavily on the theory behind how knowledge is built and utilized. Background supporting titles such as ontological design, enlightened leadership, and corporate leaders indicate the incorporation of leadership and organizational studies, whereas titles such as computer networks, matrix algebra, or computer technology point to technological and scientific aspects. Practicality can be traced by the usage of words such as quality control, curbing wasteful expenditure, and quality awards, which show that it is applied to industrial and management practices. Elements of culture and psychological factors like inner peace, a stable mind, and conspicuous consumption seem to indicate behaviors of individuals and society, both affected by systems of knowledge and usage, as well as those affecting them. The appearance of modern problems, such as the epidemic "COVID-19," video games, and the challenges the world is facing, also shows how contextual and applicable these notions are in the real world. Altogether, the word cloud implies an

interdisciplinary model that provides an all-embracing connection between philosophical investigation and contemporary issues and a sense of application.

4.3 Thematic Map

Figure 4: Thematic Map



Source: biblioshiny

Figure 4 shows that the thematic map offers interesting insights into the structure and formation of the intellectual domain of research through the analysis of three of its main concepts: ontology, philosophical aspects, and knowledge system, according to two crucial parameters: centrality (degree of relevance) and density (degree of development). The plotting of these parameters occurs in a two-dimensional strategic diagram of four quadrants, each representing the thematic role of the key words in the wider field. Centrality is observed on the x-axis, which shows how significant or pertinent a theme is to the study field at large, and density on the y-axis represents the level of internal development

or maturity of a theme. In the upper left quadrant, named Niche Themes, we have the concepts of ontology and philosophical aspects. These themes are found to have a high density and low centrality, meaning that they are mature and well-formed in their respective concentrated areas, although they are relatively peripheral and, therefore, disjointed from other central or interdisciplinary themes in the research field. Their high levels of internal relationships depict their sound theoretical developments that could have been supported by heavy theoretical overbearing, intense debates, and deep academic attention. However, their centrality is low, which leads us to think that they are not highly integrated or applied to broader research problems. This creates the connotation that the philosophical and ontological perspective may not be used in stronger or empirical fields of study, such as technological or managerial discourse in knowledge systems, which makes them concrete. The specified disconnection makes for an unrealized prospect of theoretical-perspective enrichment at central levels. Conversely, there is a knowledge system that is devoted to the lower-right quadrant in Basic Theme. The position is a high centrality-low density position, or a central and frequently recurring topic of the field, because it is referenced often by many various documents, but it lacks high theoretical or methodological richness in the field. It is one of the central themes since it is used to relate various parts of the terrain of study and provides the foundation for most of the studies. However, the scant density shows that despite being a very commonly used term, the construct of a knowledge system may not possess a fully and consistently developed structure or a consistent frame, or conceptual probing throughout the corpus. It is applicable in various circumstances and may not have any theoretical reasoning in common, which makes it scholastically frail. The present thematic arrangement shows that there is an apparent state of disconnect between the theory and the practices within the existing literature. While niche themes such as ontology and philosophical approaches bring depth and conceptual rigor, they have not been well incorporated into the prevailing and underlying theme of knowledge systems. Future research must attempt to circumvent this disparity by steadying the so-called niche impetus into the mainstream of debates on knowledge systems by incorporating theoretical depth into the niche themes. This way, it is possible to increase the topical and internal progress of the main topics discussed and help the area evolve into a more mature, interdisciplinary, and effective course. Such strategic alignment has the potential to develop new models, frameworks, and applications with a serious philosophical foundation while at the same time addressing modern knowledge management challenges.

4.4 Bradford's Law

Figure 5: Bradword's Law

Source: biblioshiny

Figure 5, named Core Sources by Bradford Law, graphically determines the main journals that are contributing to a particular field of research due to the bibliometric analysis. According to Bradford's law, which holds that journals make contributions that point towards a relatively small number being highly productive in any particular sphere, the chart categorizes journals according to their productivity. Issues published are indicated on the vertical axis, whereas the horizontal axis (log of rank) lists journals in decreasing order of productivity. The light gray box to the right with the words Core Sources at the top contains journals that have been disproportionately influential in the literature and are, therefore, the most central to the field. Concretely, four journals, including "PURUSHARTHA, ECONOMIC AND POLITICAL WEEKLY, JOURNAL OF HUMAN VALUES, and MEASURING BUSINESS EXCELLENCE," are referred to as the core sources with two and five publications on the topic, respectively. It demonstrates how they made a significant contribution to creating academic discourse and influencing research trends. The article reduction over and above these foundational sources will imply that there is a spreading out of the core sources over many journals with low contributions, as Bradford has observed decreasing returns in the productivity of the literature as the number of individuals deviates away from the foundational sources. The given pattern suggests that although the number of sources addressing the topic is high, it appears to be treated by them in a rather habitual and

insignificant sense. The researcher finds such visualization very helpful since it establishes the journals that should be targeted to obtain a literature review, publication use, and citation practices. Publication of the research in the field of science in one of these leading journals may make a study more significant and topical and contribute to its visibility in the academic community. On the whole, the figure advocates the concept of the ferocity of academic activity in several sources and lends tactical advice to the publishing world in this field.

4.5 Source Local Impact

Table 2: Source Local Impact

Source	h_index	g_index	m_index	TC	NP	PY_start
Measuring Business Excellence	2	2	0.095	90	2	2005
Purushartha	2	2	0.286	6	5	2019
Contributions To Conflict Management, Peace Economics And Development	1	1	0.111	1	1	2017
Ethical Models And Applications Of Globalization: Cultural, Socio-Political And Economic Perspectives	1	1	0.067	1	1	2011
Global Business Review	1	1	0.056	46	1	2008
Journal Of Human Values	1	1	0.5	2	2	2024
Journal Of Management History	1	1	0.056	1	1	2008
The TQM Journal	1	1	0.056	8	1	2008
Wealth, Welfare, And The Global Free Market: A Social Audit Of Capitalist Economics	1	1	0.1	1	1	2016

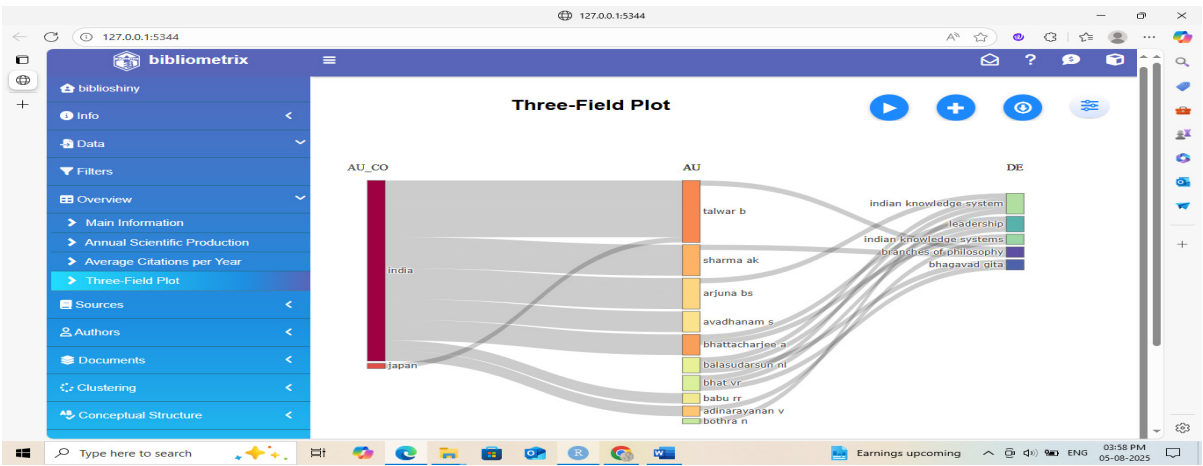
Source: biblioshiny

Table 2 provides a bibliometric summary of the 9 various scholarly sources with the details of their scientific relevance and productivity based on the crucial indicators: h-index, g-index, m-index, Total Citations (TC), Number of Publications (NP), and Publication Year Start (PY start). The ranking of the sources listed reveals that the article with the greatest Total Citations (90) is "Measuring Business Excellence," whose h-index, g-index, and m-index are 2, 2, and 0.095, respectively, indicating both a small number of citations starting in 2005 and a low scholarly impact. Although "Purushartha," having a very recent beginning of 2019, in this context has a higher m-index (0.286) than most other sources, its TC (6) and g-index (2) are low. The "Journal of Human Values" has an m-index of 0.5, a big impact in the yearly rate, whereas the journal has 2 citations and a start year of 2024, which means a good start or a new topic. The same can be said

of other sources, including "Contributions To Conflict Management, Peace Economics And Development" and "Ethical Models And Applications of Globalization and Wealth, Welfare And The Global Free Market," with only a single entry listed and a single citation, with m-index figures resting around 0.1, meaning minimal but steady academic recognition. The "Global Business Review," with only 1 article since 2008, has 46 citations, which indicate a very influential single output; and has an h-index of 1 and m-index of only 0.056, indicating little depth or breadth over time. Analogically, a similar pattern can be observed in the case of the "TQM Journal" and "Journal of Management History," which have low indices and few publications and thereby indicate limited engagement in the identified thematic area under study. On the whole, the table demonstrates a world about the low level of publication frequency and citation impact, with a couple of bright exceptions depicting the initial pace of work or one-of-a-kind contributions. The low value of h- and g-index of all sources indicates a more immature or narrow scholarly area, which could be at the crossroads of business ethics, values, globalization, and sustainability from a perspective of India or a socio-political viewpoint. In addition, having high m-index values of more recent sources, such as the "Journal of Human Values" and "Purushartha," reveals that new journals are becoming relevant at a quicker pace than older versions themselves, thus showing a change in research interest towards traditional knowledge systems and ethical business models. This review indicates a disjointed and inchoate discipline, in which individual influential articles exist, yet there is no more extensive level of scholarly interest across journals, indicating that there is a need to consolidate and refine research in the future.

- Three-Field Plot

Figure 6: Three-Field Plot



Source: biblioshiny

Figure 6: The three-field plot visually maps the relationship among countries of authors (AU_CO), individual authors (AU), and their respective keywords or research themes (DE), offering a comprehensive overview of authorial and thematic contributions within the studied dataset. On the left, the country-wise distribution shows that India is the dominant contributor, producing the vast majority of research outputs in the field, while Japan has a minimal but present role, indicating international involvement, though limited. The middle section lists the key authors, with Talwar B, Sharma AK, and Arjuna BS emerging as major contributors. The width of the connecting bands between countries and authors highlights India's strong academic presence through multiple prolific authors, while Japan links to just one contributor, suggesting a lower but possibly collaborative involvement. The rightmost field depicts the research themes (DE) derived from author keywords, showing that terms like "Indian knowledge system," "Indian knowledge systems," "branches of philosophy," "Bhagavad Gita," and "leadership" are central to the intellectual discourse. The repetition of "Indian knowledge system(s)" with slight variations points to thematic convergence yet terminological inconsistency across publications. Authors such as Talwar B and Sharma AK are strongly associated with multiple themes, indicating both thematic diversity and academic productivity. The flow from authors to themes shows how each researcher contributes to specific conceptual areas, with some focusing on classical philosophical concepts like the Bhagavad Gita and branches of philosophy, while others are inclined towards leadership and applied dimensions of Indian philosophical thought. Such interconnection implies that the researcher should take a combined approach that would involve traditional Indian philosophy and modern academic undertaking. In addition to this, the comparatively limited theme pool suggests a special research orientation with most contributions being focused on the heritage of Indian philosophy and leadership and inclined towards a culture-bound yet scholarly active research area. In summation, this three-field plot shows India to be the nexus of academic activity with a small group of significant authors who serve to define a niche area that not only connects to ancient Indian knowledge systems but also has relevance in a contemporary context, falling into repetitive themes and consistent author involvement practices.

DISCUSSION

In this study, with the help of thematic analysis and a word cloud, it is interpreted that the thematic structure of knowledge systems, particularly emphasizing ontology and philosophical aspects, is a niche theme. The findings suggest that while ontology and philosophical considerations are deeply developed within certain academic circles, their broader application in managerial practice remains limited. On the other hand, knowledge systems serve as a foundational theme, indicating their widespread relevance but potentially underdeveloped conceptual

depth in organizational contexts. According to the word cloud, "knowledge system and philosophical aspects" revolve around "leadership, management, and sustainability." Concretely, four journals, including "PURUSHARTHA," "ECONOMIC AND POLITICAL WEEKLY," "JOURNAL OF HUMAN VALUES," and "MEASURING BUSINESS EXCELLENCE," are referred to as the core sources with two and five publications on the topic, respectively. The ranking of the sources listed reveals that the article with the greatest Total Citations (90) is "Measuring Business Excellence," whose h-index, g-index, and m-index are 2, 2, and 0.095, respectively, indicating both a small number of citations starting in 2005 and a low scholarly impact. The three-field plot portrays India taking up a clear leadership position in research production, and minor yet significant foreign collaboration with Japan; key Indian authors such as Talwar B, Sharma AK, and Arjuna BS; and central research topics that reflect Indian knowledge systems, philosophy, and leadership, in addition to early terminological inconsistency in the key terminology across studies.

Table 3: Review of the top 10 cited papers

Paper	Title	Total Citations	TC per Year	Findings	Future Research Direction
Sharma & Talwar, 2005	"Corporate social responsibility: modern vis-à-vis Vedic approach"	50	2.38	Assessed business excellence measurement frameworks, emphasizing key performance indicators.	Further empirical validation of Vedic principles in CSR frameworks.
Pandey & Gupta, 2008	"Spirituality in management: A review of contemporary and traditional thoughts and agenda for research"	44	2.44	Explored global business strategies and their impact on firm performance.	Examine how spiritual principles influence managerial decision-making and organizational culture.
Sharma & Talwar, 2007	"Evolution of universal business excellence model incorporating Vedic philosophy"	39	2.05	Evaluated various excellence models and their application in business management.	Test the practical applicability of the Universal Business Excellence Model (UBEM) in diverse industries.
Koura & Talwar, 2008	"Comparing the UBEM Vedic matrix and the TQM elements deployment model using principal component analysis"	8	0.44	Investigated the role of Total Quality Management (TQM) in business performance.	Comparative studies of Vedic TQM frameworks with Western quality models across sectors.
Tenneti et al., 2022	"SthithaPrajna Leader: A Marvel of Transformational Leadership Style from Indian Ancient Wisdom"	3	0.75	Analyzed contemporary business ethics and their implications for corporate governance.	Empirical testing of the SthithaPrajna leadership model in modern organizations.

Sathish et al., 2019	"Leadership lessons from Indian knowledge system"	2	0.29	Studied the relationship between leadership styles and employee engagement.	Design leadership development programs based on Indian Knowledge Systems.
Ertuna, 2016	"Wealth, welfare and the global free market: a social audit of capitalist economics"	1	0.1	Examined the socio-economic impacts of global capitalism on wealth distribution.	Explore alternative socio-economic models grounded in Indian philosophy.
Lamond, 2008	"New Age Management Philosophy from Ancient Indian Wisdom"	1	0.06	Provided a historical perspective on management theories and practices.	Study the adaptability of ancient Indian management principles to modern corporate settings.
Adinarayanan&Smrithi Rekha, 2017	"Shakthi Worldview: An Inclusive and Expansive Worldview for a Sustainable Future"	1	0.11	Investigated conflict resolution strategies in economic development.	Develop frameworks for inclusive development rooted in Shakthi Worldview.
Ranisha et al., 2024	"Human development model based on yogic wisdom for well-being and self-actualization: A conceptual framework"	1	0.5	Explored human values in organizational decision-making.	Empirical testing of yogic models in enhancing workplace well-being and self-actualization.

Source: Biblioshiny and compiled by the author

5.1 Implications

The point where the Indian Knowledge System (IKS) and sustainability meet is an immense chance to recontextualize the issues of the current environment, society, and economics in the context of traditional knowledge. In theory, the assimilation of IKS into the vernacular of sustainability develops a paradigm shift towards the actualization of knowledge. It questions the pre-eminence of Western-centric epistemologies and argues for the legitimacy of indigenous and ancient Indian thought systems as alternative models that are locally situated and ecologically sustainable. Sustainable thinking in IKS is metaphysical and ethical in terms of concepts, i.e., Dharma (righteous duty), Ahimsa (non-violence), Sarvodaya (welfare of all), and Panchabhuta (five elements). Such notions also resonate with contemporary concepts of sustainability, i.e., circular economy, ecological balance, and intergenerational equity, thus broadening the theories of sustainability research. In addition, the implementation of IKS allows for the creation of global sustainability models that Francis and Rankin (2018) describe as being a combination of global environmental objectives and local cultures and spiritualities. It enhances our understanding of human-nature relations, community-based resource management, and spiritual ecology, which are often underrepresented in techno-centric or policy-based models of sustainability.

In a real-life scenario, anchoring sustainability to IKS has a number of practical uses. Several

traditional agricultural practices, such as organic farming, crop rotation, rainwater harvesting, and natural pest management, among others, have been known to be actively undertaken in India and can offer cost-effective, environmentally friendly, and scalable solutions to secure food and soil degradation. Traditional techniques and other Ayurvedic traditional knowledge are helping in holistic healthcare models, which lower the over-reliance on chemical medicine and safeguard biodiversity. In the area of building design with climate-compatible construction, Vaastu Shastra architecture methods of environmentally friendly buildings merge with the world of contemporary environmentally friendly architecture. The system of Panchayati Raj and general customs of sharing resources within the community embody a concurring ring within the community, ruling the participatory and regionalized systems of government. The revival of these practices can enhance the agricultural sustainability of the rural population, preservation of culture, and climatic resilience. In addition, having IKS as a part of organized instruction and protestations produces vigilance, esteem, and creativity that rely on the tradition of endurance. It can empower local people and communities, especially the indigenous groups whose know-how can be validated and engaged in some facets of both sustainability planning and realization.

In order to implement these implications, though, there are several issues that are of critical concern. To bridge this gap, the first thing is that the traditional practices need to be documented, computerized, and validated scientifically to render such practices suitable for the current times and applicable to them. Second, an overemphasis on the traditionalism of all practices must be viewed with reservations because a critical evidence-based combination is required to remain current and efficient. Third, the policy frameworks should promote knowledge pluralism that will accommodate an interdisciplinary approach, even among scientists, environmentalists, policymakers, and traditional knowledge holders. Lastly, it can facilitate sustainable thinking due to the ecological consciousness created by the influence of Indian philosophy throughout the teaching process, which will result in the creation of green citizens.

CONCLUSION

To sum up, the combination of Indian Knowledge Systems and sustainability has theoretical richness and also feasibility. It offers ecologically sound, ethically based, and culture-relevant alternatives to dominant models of development. Using and realizing traditional Indian wisdom may help in the establishment of the Sustainable Development Goals (SDGs) of the United Nations, particularly in such concerns as climate action, health, education, and sustainable communities. This combined strategy not only benefits the outcomes of sustainability but also provides benefits in the form of cultural pride, intergenerational learning, and social harmony. The relevance of the study's findings lies in the fact that business and policy alike need to fill the gap between theory and practice so that knowledge systems can

meaningfully lead to strategic and operational advancement. It has some limitations, but this study also offers very valuable insights. It is the only Scopus database I have used in this study. However, the dataset might not fit everything included in the topic, so the findings may not apply to all cases. It also lacks empirical proof and scientific validation, which impedes validation within conventional academic and institutional contexts. Its transmission across generations has been weakened with the rapid modernization and westernization of education systems. Institutional disregard for IKS, a scarcity of funding for IKS scholarship, and inadequate policy integration also limit its application. These factors necessitate bridging traditional wisdom with modern science through interdisciplinary scholarship and inclusive policy contexts. The dataset needs to be extended in the future, and the applications of various industries need to be investigated.

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