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Supply Chain Management and the United Nations Sustainable Development Goals

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ABSTRACT

This paper explored the relationships between the United Nations Sustainable Development Goals (UNSDG) and social sustainability in supply chain management (SCM). Sustainable development is a philosophy that seeks to achieve human development goals while protecting the ability of natural systems to provide natural resources and ecosystems for all economies and societies. The desired state of society is where living conditions and resources meet human needs while preserving the integrity and stability of the natural systems. Most of the work on sustainability in SCM is on economic and environmental sustainability. Only eight papers were found that reflected social sustainability. Nevertheless, social sustainability significantly impacts supply chain management, such as employee engagement, which leads to a decrease in waste, and a shorter lead time from manufacturing locations to markets. The study is based on an analysis of bibliometric data published in the Scopus database between 1991 and 2020. This study will help researchers get new perspectives on sustainable supply chains. Societal well-being is the goal of the UN SDGs. Organizations and countries can address them by recognizing the connections between UNSDGs and SCM. This is the first study to explore the literature available on UNSDG and its relationship with supply chain management.

Keywords: *supply chain management (SCM, social sustainability, social development, United Nations Sustainable Development Goals (UNSDG)*

INTRODUCTION

The world has become smaller due to advancements in communication and transportation technologies. The high-speed internet and improvements in transportation infrastructure turned the world into one global market. There is no denying that globalization has altered the modern world. It has influenced and will continue to influence how people communicate, travel, and conduct business. Globalization has many advantages and challenges. Companies need to comprehend the benefits and challenges of globalization, impacting global connections in trade, technology, and other areas (Locke, 2003). Due to technological advancement and globalization, supply chain management performance has been impacted dramatically. However, supply chain vulnerabilities have widened considerably in recent years (Barry, 2004). The oldest documented global supply chain is the spice trade from India to Africa and Europe, which is a few thousand years old. Another example of a global supply chain is the fur trade from North America to Europe, which started in the seventeenth century (Gurtu, Searcy, & Jaber, 2017). Many agencies involved in the supply chain are called stakeholders. The theory of stakeholders, developed in the late 1970s, is critical in arguing for firms to take on new roles (Loorbach & Wijsman, 2013).

To manage the organizations more effectively, Freeman (2010) stated that companies must understand their relationships with not only traditional groups like suppliers, customers, and employees, but also non-traditional groups like government, environmentalists, and special interest groups, and these all influence supply chains. SCM is a collaborative effort in which members develop, design, and administer value-added processes to serve customers according to their needs (Manzouri *et al.*, 2015). The primary goal of SCM is to minimize costs and consequently enhance profits for a company. To meet this objective, labor-intensive supply lines were mechanized in the past (Alhaddi, 2015).

"Supply chains" gained importance as globalization accelerated in the late 1990s. The imports from China to the United States rose from 45 Billion USD in 1995 to 280 Billion

USD in 2006, i.e., approximately six times in eleven years (Taylor, 2015).

Supply chain competitiveness (SCC) is a top concern for businesses to obtain a competitive advantage resulting from internal functional integration in an organization. The ability of a supply chain to execute efficiently and effectively utilize firms' resources that are superior to other supply chains is referred to as SCC. Therefore, efficient supply chains are necessary to increase profitability (Mukhtar & Azhar, 2020). In today's competitive business environment, organizations must compete fiercely for survival. Several factors contribute to an organization's success, including top management support, leadership, organizational culture, human resources, operational processes, and financial stability (Kumar *et al.*, 2020).

A supply chain involves many organizations converting raw materials into a final product (**Figure 1**). The extraction of ores for raw materials is the first step in a supply chain, i.e., a supply chain starts with the extraction of ores for raw materials. It goes through value addition, converting them into finished products by various manufacturers, and finally delivering finished goods to consumers. The scope of this study is limited to two areas, "Assembly of child parts at Tier 1 suppliers" and "supply of parts from Tier 1 to OEMs for assembly", shown in grey in **Figure 1**.

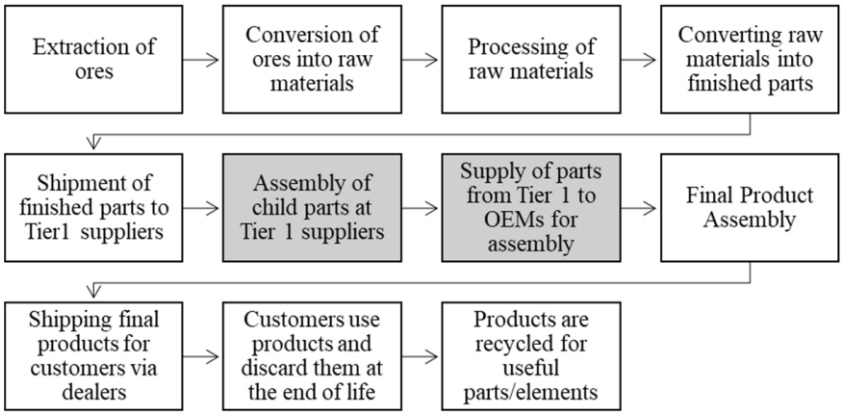

Figure 1. Scope of Supply Chain Management

Organizations employ various strategies and techniques to reduce the likelihood of disruptions and their harmful effects on supply chains (Zsidisin *et al.*, 2000). Organizations managing global supply chains face a high complexity due to many suppliers in diverse socioeconomic locations, growing customer expectations, and awareness of social and environmental sustainability. Managing supplier relationships is crucial for the long-term success of supply chains (Harms *et al.*, 2013). Giunipero & Eltantawy (2004) suggest that supply chain custodians should carefully handle the risks in these settings that are becoming more competitive as longer lead times and the possibility of transportation disruptions make supply continuity more precarious. Collaboration between buyers and sellers is suggested to reduce supply chain risks (Vanany *et al.*, 2009).

Raghunath & Devi (2018) stressed the need to take care of the risks of supply chains as customer demands are increasing and competitiveness is forcing organizations to go global. Gurtu & Johny (2021) mention that the supply chain areas are expanding, and only a tiny part of supply chain management concentrates on futuristic disruptions in supply chains. Companies doing business around the globe are at a higher risk. As a result of globalization, companies must recognize the need for sustainability and sustainable supply chain management (SSCM). The performance of SSCM can be measured on social, environmental, and economic parameters (Carter & Jennings, 2002). SSCM analyses environmental, economic, and social effects when implementing environmentally friendly manufacturing methods across the product lifecycle (Sisco *et al.*, 2011). Sustainable development has been a part of the global discussion for almost 30 years (WCED, 1987; United Nations, 2015; Missimer, Robert, & Broman, 2017). The primary goals of sustainable development are protecting the environment and improving the economy and society for both the current generation and future generations (Halkos & Gkampoura, 2021). Sustainable supply chain management is an extension of supply chain management. It is vital to develop management techniques that embed sustainability in supply chains, specifically in emerging economies like India.

Examining and establishing a relationship between the United Nations Sustainable Development Goals (SDGs) and sustainable managerial practice is crucial. The SDGs can be achieved with the support of sustainable supply chain management. Bali Swain & Ranganathan (2021) studied the interconnections and used network analysis at the global level to identify interactions between the SDGs and economic, social, and environmental indicators that work through complex interlinkages. The SDGs have worldwide relevance and include topics previously not considered relevant to development. SDGs are appropriate for everyone and everywhere (Olwig, 2021).

The United Nations Organization (UNO) developed 17 Sustainable Development Goals (SDG) in 2015 as a global transformative agenda for 2030. These objectives create a shared vision for people's peace and prosperity, as well as the

planet's long-term viability. The 17 SDGs call for unity to save Earth and humanity. These SDGs recognize that environmental and social sustainability are addressed through literacy, reducing inequality, and improving health. While reviewing sustainable development from a critical perspective, Springett (2013) mentioned, "Sustainable development is a term that is widely used, but raises epistemological and practical problems that have led to a strong challenge, even rejection, of the term." Fraser (1993) advocated that our immediate need is to look beyond our current mindsets and practices for pictorial and conceptual ideas and guidelines that can lead us to a more balanced future. Organizational policies play a vital role in employees' quality of life, their businesses' environmental impact, and economic performance. The SDGs can be used as a guide to help enterprises strategically manage their Corporate Social Responsibility (CSR) efforts in line with global and national sustainable development goals. Improved CSR participation in sustainable development necessitates a CSR–SDG link. CSR encourages people to adopt SSCM to impact businesses (Khan *et al.*, 2021).

UNSDGs and CSR objectives are well aligned and complement each other. In many studies, CSR initiatives have shown improvements in business performance (Anderson *et al.*,2020). CSR is a self-regulatory business model that aids in developing new products and services and makes organizations socially accountable to themselves, their stakeholders, and the public. CSR, also called corporate citizenship, makes organizations aware of economic, social, and environmental consequences on societies (Fernando, 2021). CSR is defined by the United Nations Industrial Development Organization (UNIDO) as "a management concept in which organizations incorporate social and environmental issues into their business operations and interactions with stakeholders." CSR is commonly defined as the process through which a company achieves a balance of economic, environmental, and social imperatives ("Triple Bottom Line Approach") while meeting the needs of shareholders and stakeholders. CSR has been the catalyst term used to define how corporations engage with society. This positive engagement will have a beneficial impact on the functioning of businesses, especially in making them more sustainable. Alhaddi (2015) reviewed the literature and discovered that the term "sustainability" was used in various ways. This term was used in several studies; however, it only referred to one or two aspects of the Triple Bottom Line (TBL). TBL considers all three elements of performance – economy, environment, and social – and assumes they are interconnected and equally significant (Elkington, 2004). Global and national perspectives shifted toward human rights, security, and societal well-being in the early twenty-first century (Abidi *et al.*, 2017). Holistic development can be achieved through sustainable consumption of resources, besides taking care of the economy.

According to Hosey (2017), 62% of people believe in climate change, 54% believe in the term "sustainable," 59% had no idea about sustainability, and 76% found it "expensive." Participation in sustainability programs is both rewarding and challenging. Sustainability and SCM have progressed from a perspective and analysis of stand-alone research in social and environmental domains to the convergence of sustainability as the TBL and the formation of SSCM as a fundamental framework (Carter & Easton, 2011). Corporate sustainability and SSCM perspectives are primarily centered on the notion of the TBL. Increased communication, demarcation of buyer-supplier linkages, and supplier development have been mentioned in the literature to address product sustainability (Das & Mitra, 2018; Seuring & Müller, 2008b).

The collective performance of business organizations is an indication of a prosperous society. Business growth indicates increasing prosperity of the societies. Using resources consciously leads organizations to do well as their raw material, water, and energy consumption decreases. Social sustainability is a less explored area, as sustainable development often focuses on the environmental aspects of sustainability. Studies have primarily concentrated on the environmental dimension of sustainability, with fewer studies on the social dimension (Mohseni *et al.*, 2019; Pattnaik & Pattnaik, 2019). All three dimensions of sustainability must be addressed to attain a holistic, sustainable outcome. The modern definition of sustainability is "development that meets current demands without jeopardizing future generations' ability to meet their own needs."

For the overall development of a society or country, there must be a balance between economic, environmental, and social sustainability. The United Nations Sustainable Development Goals (UNSDGs) are an attempt in this regard (**Figure 2**). The Sustainable Development Goals (SDGs) are defined as "integrated and indivisible, global, and universally applicable, taking into account different national realities, capacities and levels of development and respecting national policies and priorities. Targets are aspirational and global, with each Government setting its national targets guided by the global level of ambition but taking into account national circumstances" (Boar *et al.*, 2020). Asadikia *et al.* (2021) also advocate that the Sustainable Development Goals framework established by the United Nations is widely recognized as a significant global agreement that has received unanimous support from all UN members. These goals respond to economic, environmental, and societal concerns about sustainability.

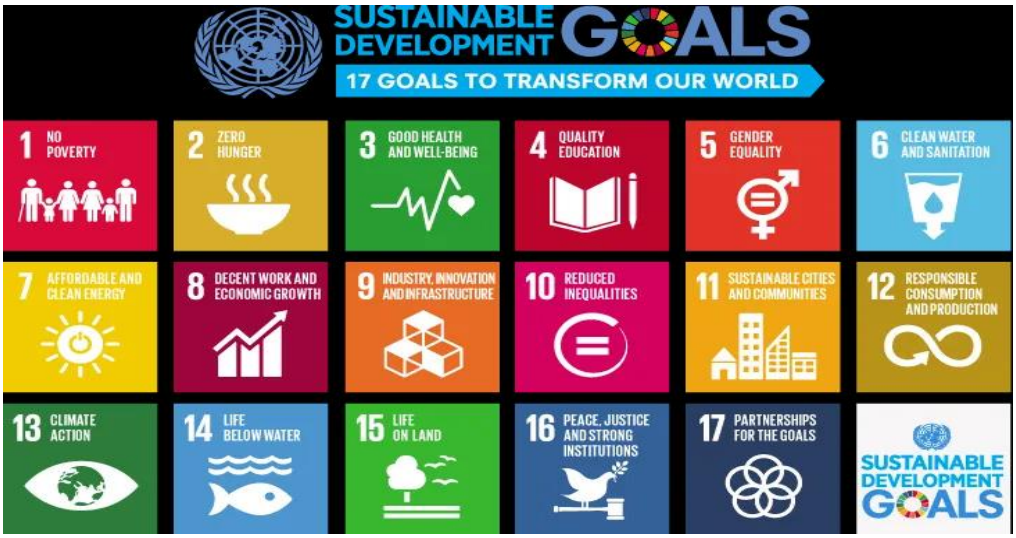

Figure 2. Sustainable Development Goals
Source: https://sdgs.un.org/goals

Each SDG has many specific targets and indicators (**Table 1**) and can be linked to the economic, social, or environmental dimensions of sustainability (Boar, Bastida, & Marimon, 2020). Further, 230 indicators track these seventeen SDGs' economic, social, and environmental progress. For example, SDG-8 (Decent Work and Economic Growth) and SDG-9 (Industry, Innovation, and Infrastructure) are closely linked to sectors that produce jobs, decrease poverty, and improve people's lives. Organizations play a critical role in supporting these SDGs. Organizations and supply chains are intertwined such that sustainable supply chain management is a prerequisite for sustainable organizations. Therefore, efficient operations need flawless sustainable supply chains. Traditional supply chain management can be extended to include sustainability, which can help achieve SDGs.

Table 1. SDG Classification

Dimension	SDG
Economy	8, 9, 10, 12
Social	1, 2, 3, 4, 5, 7, 11, 16
Environment	6, 13, 14, 15

Source: Boar, Bastida & Marimon (2020)

Elkington (2004) gave the concept of the Triple Bottom Line (TBL) of corporate sustainability. Three pillars of TBL are Profit, Planet, and people, i.e., economy, environment, and society. Concerns over the depletion of natural resources for future generations gave rise to the notion of sustainability (Marshall *et al*., 2015; Sánchez-Flores *et al.*, 2020). A company's overall revenues and profitability are affected by sustainability practices (Kiron *et al.*, 2014; Hummel & Schlick, 2016; Kaur & Sharma, 2018). Supply chain management encompasses suppliers, manufacturers, and customers to increase the value of products at the lowest costs (Shaharudin *et al.*, 2018). The inefficiency of suppliers is influenced by the poor delivery or quality performance of suppliers' networks (Wilding, 1998). When all the links in a supply chain work well, the supply chain becomes efficient. Direct and indirect employees are important links in SCM, and their social well-being is one of the critical responsibilities of organizations. Social sustainability is an essential aspect of TBL that deserves more attention for achieving organizational excellence. Swain (2018) examined sustainable development goals and stated that, despite various issues, SDGs stand as new global development goals agreed upon by world leaders. Researchers attempted to investigate SSCM, the elements that influence it, and its risks in their literary contributions.

The relationships between SDGs and SCM have been identified as a gap in the literature. A bibliometric examination of the work on sustainable development goals and the relationships between SDGs and SCM is the main contribution of this paper. The rest of the article is structured as follows. The research methodology is presented in Section 2. The analysis and discussion are presented in Section 3, followed by conclusions in section 4.

METHODOLOGY

This is a study of the existing literature on UN SDG and SSCM using bibliometric analysis to explore the relationships between SDGs and SCM. This study used Scopus data from 1991 to 2020. The reason for choosing the data from 1991 is that the World Commission on Environment and Development report came in the late 1980s and people started taking action in the early 1990s. The reason for choosing this database is that it is a very reliable, extensive, and multi-disciplinary academic database with papers from engineering, management, operations research, medicine, economics, agriculture, and environmental science. The approach applied to the study begins with identifying keywords, then collecting research articles using those keywords, analyzing the data, and discussing the findings. The methodology in this research is based on the work of Gurtu, *et al.* (2015). The study has been conducted using four steps as follows:

A. Collection of materials: The material needed was defined and then delimited. In addition, the analysis unit was also defined (i.e., single paper).
B. Descriptive analysis: Formal aspects of the material, such as the number of publications per year, is evaluated, giving the foundation for subsequent theoretical analysis.
C. The structural dimensions and related analytic categories to be applied to the collected data are chosen. The significant issues of the analysis are structural dimensions, which are made up of analytic categories.
D. Material analysis: The data gathered from Scopus is examined in relation to the structural dimensions. This should allow for the identification of pertinent concerns as well as the interpretation of the results.

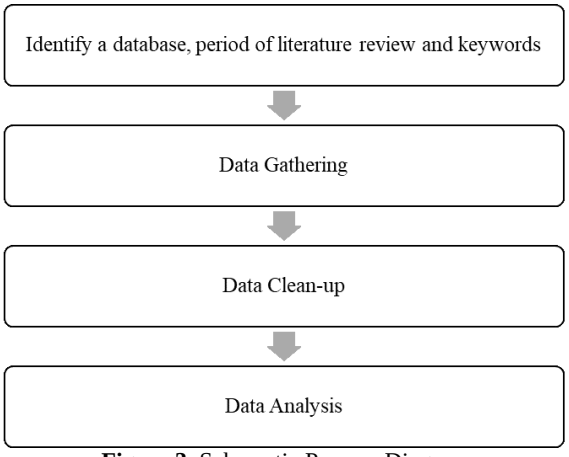

Figure 3. Schematic Process Diagram
Source: Gurtu, Searcy, & Jaber (2015)

Figure 3 illustrates the process of research methodology. The research began with selecting and identifying the string of keywords, emphasizing the relationship between UN SDGs and sustainable supply chains and the time of the study. Following that, the data was cleaned, and suitable papers were selected for inclusion in the sample by reviewing the keywords.

The search began with a broad perspective to see how the word sustainable development aim was used in various fields and then narrowed down to the items that were relevant to our study. The database for the search was limited to 1991 to 2020, which finally funneled down to 2015 to 2020 to find out the relationship between UN SDGs and the sustainable supply chain. The data from 2015 was considered because SDGs came into existence in 2015. The distinct keywords were discovered over several iterations, and a list was created from a review of existing literature. The papers were examined to see which journals published them, how frequently they were published, how often the keywords were used, and which publications appeared in numerous keyword searches. By inputting the syntax with quote marks, the concatenated list of papers can be reproduced: "sustainable development goals" or "Sustainable Development" + "Automotive Industry" or UNSDG + "Sustainable supply chain" or "Social sustainability" + "Automotive industry" or TBL + UNSDG + "Automotive Industry" or Sustainable + Automotive.

It is important to mention that researchers may find a different number of citations from the above syntax since citations vary with time. The period of three decades was chosen to have a fair idea of the work done on sustainable development since the World Commission on Environment and Development introduced this concept.

ANALYSIS

This study analyses data on social sustainability in SCM, UNSDG, and sustainability in the automobile sector from 1991 to 2020 using both qualitative and quantitative methods. The UNSDGs are a recent development. Examining the work done on SDGs over the previous three decades is necessary hence a longer time frame of 1991 to 2020 was chosen. Eleven thousand fifteen (11,015) papers were published that used "sustainable development goals" as a keyword. **Table 2** shows the year-wise distribution of papers published. The total is for the ten years in that column.

Table 2. Papers Published using "Sustainable Development Goals" as a Keyword

Year	Documents/Year	Year	Documents/Year	Year	Documents/Year
1991	1	2001	1	2011	25
1992	2	2002	7	2012	30
1993	0	2003	8	2013	50
1994	4	2004	12	2014	80
1995	1	2005	10	2015	295
1996	1	2006	11	2016	709
1997	4	2007	11	2017	1235
1998	2	2008	12	2018	1916
1999	2	2009	19	2019	2609
2000	4	2010	15	2020	3939
Total	**21**	**Total**	**106**	**Total**	**10888**

The data was further examined for comprehending research activities over five years, and some extremely intriguing information was discovered. **Table 3** shows changes in the average publications in the band of five years starting in 1991. An increase in average publication every five years indicates an increasing focus in this area. However, it is

surprising that the average of 30 is skewed in the last five years, i.e., the averages for the 25 years (1991 through 2015) were below the average for 30 years (1991-2020). The averages for the 25 and 30 years (starting in 1991) jumped from 24.3 documents per year to 367.2 papers per year, respectively. This is a more than 15-fold increase and a clear indication of a quantum increase in research on sustainability in the last decade, indicating that SDGs have gained significant importance after 2015.

Table 3. Changes in the Number of Documents per Year

Year	Total No. of Documents	Average Document/Year
1991-1995	8	1.6
1996-2000	13	2.6
2001-2005	38	7.6
2006-2010	68	13.6
2011-2015	480	96
2016-2020	10, 408	2081.6
Total	**11,015**	**367.2**

Further, the research documents were explored based on discipline, and it was observed that only 5.5% of the research papers belong to the management discipline. In contrast, the contribution of social science and environmental science is considerably high, 21.50% and 19%, respectively. The other disciplines contribute 12.9% of the research (**Figure 4**).

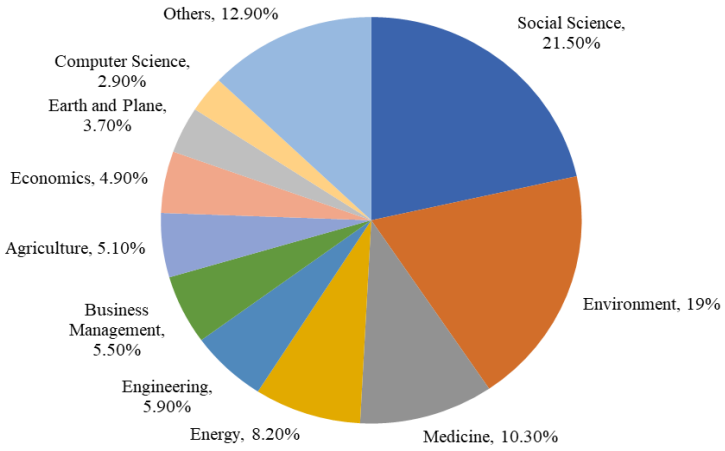

Figure 4. Discipline-wise Distribution of Documents

Multiple disciplines contribute toward creating a diverse body of literature for an interesting and contemporary field. A total of 117 journals from different areas published research on sustainability between 1991 and 2020. A list of journals covering the identified keywords is shown in **Table 4**. The work in the field of sustainability increased from 2013 onwards, indicating its importance and awareness in research as well as the business world. We can also observe from **Table 4** that most of the research work in the area of sustainability is still undertaken and published by journals from the developed world. Hence, we can also look forward to increasing the awareness of SDGs and social sustainability as a business practice in developing countries. One way of doing the same is to increase funding for research in the area of social sustainability and SDGs. **Table 5** lists the top ten countries working on sustainability and the number of research articles resulting from their efforts. The US, the UK, and Australia contributed to more than 50% of publications. It shows sensitivity and focuses on social sustainability in these societies.

Table 4. Top Ten Journals and Their Contributions

Journals	1991-2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	Total
Sustainability (Switzerland)	0	6	5	3	20	31	97	181	417	58	818
Journal of Cleaner Production	2	2	1	1	6	2	28	54	82	47	225
IOP Conference Series: Earth and Environmental Science	0			1		2	10	30	88		131
PLoS ONE	0			4	13	18	22	22	36	7	122
World Sustainability Series	0				1	7	54	1	54		117
Science of the Total Environment	1			1	3	6	8	34	48	15	116
The Lancet	2	2	2	13	15	19	20	9	11		93
International Journal of Environmental Research and Public Health	0		1	1	4	5	12	23	38	6	90
BMJ Global Health	0				7	14	17	25	21		84
World Development	1			1	2	6	12	22	27	9	80
Others 3381 journals	176	40	71	270	618	966	1386	2118	2997	497	9139
Total	**182**	**50**	**80**	**295**	**689**	**1076**	**1666**	**2519**	**3819**	**639**	**11015**

Table 5. Contribution of Academic Research by the Top Ten Countries on Sustainability

Country	Documents /year	Share (%)	Cum share (%)
United States	2500	22.7	22.7
United Kingdom	2025	18.4	41.1
Australia	1020	9.3	50.3
Germany	800	7.3	57.6
India	750	6.8	64.4
China	690	6.3	70.7
Canada	675	6.1	76.8
South Africa	660	6.0	82.8
Switzerland	625	5.7	88.5
Spain	625	5.7	94.1
Others	645	5.9	100
Total	11015	100	

The business world has finally realized the importance of sustainability. The study conducted by numerous countries in various domains of management and technology demonstrates the concentration on this subject (**Table 6**).

Table 6. Documents Containing "Sustainable Development" as a Keyword

Year	Documents/Year	Year	Documents/Year	Year	Documents/Year
1991	0	2001	15	2011	25
1992	0	2002	10	2012	45
1993	0	2003	22	2013	46
1994	0	2004	25	2014	38
1995	1	2005	34	2015	52
1996	1	2006	35	2016	69
1997	0	2007	39	2017	55
1998	1	2008	16	2018	47
1999	2	2009	17	2019	64
2000	4	2010	20	2020	65

A total of 748 papers containing "Sustainable Development" as a keyword were found from1991 to 2020. However, the double-digit publications started in the twenty-first century. Only nine papers were published in the first ten-year period under investigation. This was to understand better the work on supply chain management's sustainable development relationships in the automotive industry. The automotive industry has a significant role in developing economies. It is one of the labor-intensive industries in many countries. The data was analyzed from the point of view of understanding the work done on the relationship with key words "Sustainable" + "Automotive." A total of 58 papers

were retrieved. The initial twelve years of the study have not observed any research papers in the area. After that, research was conducted, and articles were published in this area (**Table 7**).

Table 7. Number of Documents Containing Sustainable Automotive as Keywords

Year	Documents/Year	Year	Documents/Year	Year	Documents/Year
1991	0	2001	0	2011	2
1992	0	2002	0	2012	6
1993	0	2003	1	2013	4
1994	0	2004	1	2014	4
1995	0	2005	1	2015	7
1996	0	2006	1	2016	6
1997	0	2007	2	2017	5
1998	0	2008	1	2018	6
1999	0	2009	1	2019	5
2000	0	2010	1	2020	4

Further assessing the research on automotive supply networks, we could find papers in the Scopus database from 2002 only. Forty-six articles over two decades were found in the search, indicating that this field of study is still in its infancy and possesses a lot of scope for research (**Table 8**).

Table 8. Papers Containing Keywords "Sustainable Development," "Automotive Industry," and "Supply chain"

Year	Documents/year	Year	Documents/year	Year	Documents/year
2000	0	2007	1	2014	3
2001	0	2008	0	2015	6
2002	1	2009	0	2016	5
2003	0	2010	0	2017	3
2004	0	2011	1	2018	5
2005	2	2012	5	2019	5
2006	1	2013	5	2020	3

We observed that just eight publications on social sustainability in the automotive sector were published globally between 2012 and 2020. It demonstrates that other social issues and SDGs have received more attention than social sustainability in supply chains. Social sustainability research is scanty, indicating a gap and an enormous scope of study in this field. **Table 9** shows the number of social sustainability documents published each year. The process of distilling numerous facts to arrive at the research gap is depicted in **Figure 5**.

Table 9. Documents on the Relationship of UN SDG and Social Sustainability

Year	Documents/year	Year	Documents/year
2012	1	2017	0
2013	1	2018	0
2014	1	2019	2
2015	0	2020	2
2016	1	Total	8

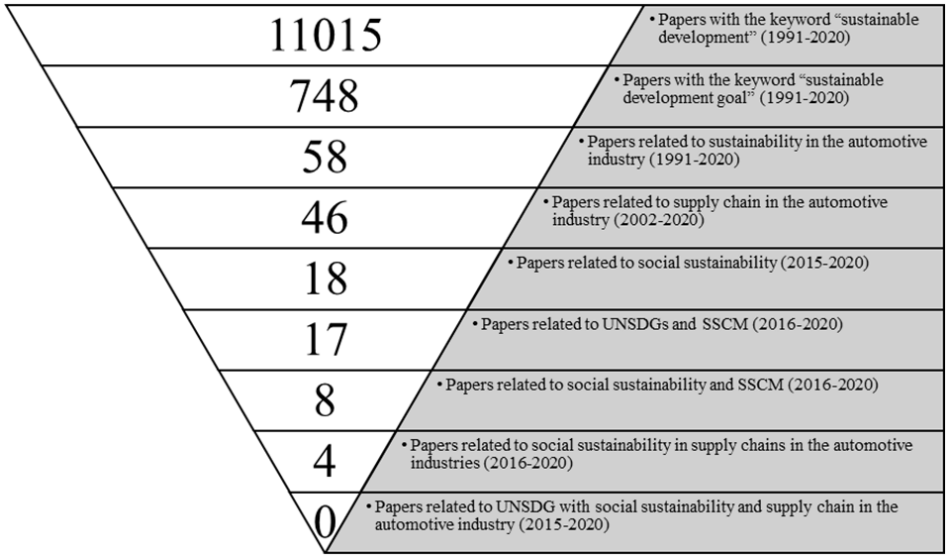

Figure 5. Funneling of Literature on Sustainable Development, SDGs, and Their Relationship to the Automotive Industry

Over the last three decades, a lot of work on sustainable development has been done. Despite this, a lack of work on long-term sustainable supply chain development remains an under-explored area. The United Nations adopted SDGs to help streamline human development efforts. The bibliometric analysis showed that little work had been done on the relationship between the SDGs and sustainable supply chains. As mentioned before, social sustainability generally got little attention in the past.

CONCLUSION

This study aims to comprehend and evaluate the work of researchers on sustainable development and its relationship to SSCM across time. (Fraser, 1993) suggests that Sustainable development issues must be addressed in an interdisciplinary and multicultural framework. We can make a difference by uniting and sharing our experiences as people with many perspectives, cultures, and beliefs. The steps towards achieving sustainable development, based on knowledge and experience, are becoming more meaningful and achievable. Connecting organizations' long-term aims to the UN's Sustainable Development Goals is critical. From 2016 to 2020, academics paid attention to the UN SDGs, according to the report. In addition, Alvino *et al.* (2020) argue that using intellectual capital has gotten less attention to the 2030 agenda and created standards for firms. No country can achieve overall development without caring for the economy, environment, and society. Taking care is necessary, but sustainable economic, environmental, and social solutions are critical for a country's success.

Sustainability must be implemented across the entire value chain in the industrial setup. Industry 4.0, which is technology-driven, has revolutionized the industrial sector. The European Commission has called for a fifth Industrial Revolution, dubbed Industry 5.0, to create a sustainable, human-centric, and silent European industry (Xu *et al.*, 2021). Human centricity and resilience, two of Industry 5.0's core values, have emerged as fundamental driving forces, with the Sustainable Development Goals playing a pivotal role (Xu *et al.*, 2021). Emphasizing the role of local governments, Liao *et al.* (2021) suggest that they should have greater authority in deciding the developmental plans of SDGs.

Mauerhofer *et al.* (2020) indicated that accomplishing the Sustainable Development Goals (SDGs) necessitates private and public sector involvement. According to this paper's bibliometric study, there is no research linking the United Nations SDGs to the automotive sector, especially social sustainability. Overall, the research presented in this paper provides several novel insights and seeks to open a new dialogue between the UN SDGs and SSCM and investigate new research possibilities. This research can be advanced by establishing a clear link between the United Nations SDGs and SSCM and how they can benefit organizations. One of the potential applications is in Automotive Industry, FMCG, and construction. A research dimension can be expanded to understand better the connections between SDGs and leaders' decision-making processes. Furthermore, the research can be expanded on a larger scale to examine the relationship between SDGs and societal happiness.

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