Addressing the Global Environmental Crisis: Strategies for Sustainable Development

Subhan Ansori¹, Ramdan Yusuf²

¹STAI Al-Aqidah Al-Hasyimiyah Jakarta: <u>dehansemha@gmail.com</u> ²Universitas Madako Tolitoli: <u>ramdanyusuf792@gmail.com</u>

Article Info

Article history:

Received August, 2023 Revised August, 2023 Accepted August, 2023

Keywords:

Global, Environmental, Crisis, Strategies, Sustainable Development, Bibliometric

ABSTRACT

The global environmental crisis presents an urgent challenge that requires comprehensive strategies for sustainable development. This research employs a bibliometric analysis and VOSviewer visualization to examine the evolving landscape of literature on strategies to address the crisis. The study identifies clusters of research themes, influential authors, and key concepts. Results reveal prominent clusters discussing environmental governance, economic growth, ecological crises, and the role of education in sustainable development. Highly cited publications encompass the triple bottom line concept, sustainable business strategies, and knowledge systems. The analysis underscores the interdisciplinary nature of the field and the need for integrated approaches to achieve ecological, social, and economic sustainability. This research offers insights into current trends and informs future research and policy directions.

This is an open access article under the **CC BY-SA** license.



Corresponding Author:

Name: Subhan Ansori

Institution: STAI Al-Aqidah Al-Hasyimiyah Jakarta

Email: dehansemha@gmail.com

1. INTRODUCTION

global environmental crisis stands as one of the paramount challenges facing humanity in the 21st century. The convergence of climate change, biodiversity loss, resource depletion, and pollution has precipitated urgent need an comprehensive and sustainable strategies to this crisis. As societies economies strive to balance development environmental preservation, identify, imperative to develop, and implement effective strategies for sustainable development has become increasingly critical [1]-[3].

Addressing the multifaceted challenges of the environmental crisis requires a comprehensive approach that considers not only ecological factors but also social, economic, and political dimensions. Human activities, industrialization, urbanization have led to severe impacts on ecosystems, climate change, and increased risks for people living in affected areas5. These activities have resulted in the loss, degradation, and fragmentation of natural habitats, which have devastating effects on biodiversity[4]. Climate change has also led to more frequent extreme events, such as floods heatwaves, which exacerbate environmental crisis[5]. To address these challenges, various strategies employed. For example, improving energy efficiency, promoting electrification and decarbonization, adopting cleaner fossil combustion technologies, and expanding natural gas storage capacity can help reduce the negative impacts of human activities on environment[6]. Additionally, the understanding the ecological niches of various species and their habitats can provide insights into the consequences of humaninduced changes and inform conservation efforts[7]. Furthermore, it is essential to

develop accurate models and predictions of the impact of human activities and extreme events on the environment[8]. This can help decision-makers implement policies economic loss assessments, city reopening, environmental resilience, and medical allocation[9]. Monitoring resource managing the environmental consequences of large-scale events, such as volcanic eruptions, can also provide valuable information for environmental governance[10]. Lastly, it is crucial to consider the broader context of design and implementation policy addressing environmental challenges. For instance, evaluating the robustness environmental policymaking systems during crises, such as the COVID-19 pandemic, can help identify areas for improvement and inform future policy decisions[11]. adopting a multifaceted approach that considers ecological, social, economic, and political dimensions, we can better address the complex challenges posed by the environmental crisis and work towards a more sustainable future.

The concept sustainable development, as articulated by the Brundtland Commission in 1987, envisions a future where development meets the needs of the present without compromising the ability of future generations to meet their own needs. Achieving this delicate balance requires a comprehensive set of strategies that address the root causes of environmental degradation while fostering economic growth, social equity, and technological innovation. These strategies must be underpinned by scientific rigor, informed by multidisciplinary research, and adaptable to the evolving dynamics of the global environmental landscape [12]-[17].

This research seeks to contribute to the understanding of strategies aimed at overcoming the global environmental crisis and advancing sustainable development. Through a systematic analysis of the existing literature, we endeavor to map the landscape of research in this domain, shedding light on the trends, gaps, and influential works that have shaped the discourse. By employing bibliometric analysis, we aim to uncover patterns in publication trends, identify key authors and collaborative networks, assess the impact of seminal works, and discern emerging themes that warrant further exploration. In the subsequent sections of this research, we delve into the methodology employed for data collection and analysis, presenting a comprehensive approach to capturing the relevant literature extracting meaningful insights. The results of our bibliometric analysis provide a nuanced overview of the state of research on strategies for sustainable development, elucidating the trajectory of this field and its implications for addressing the global environmental crisis.

2. LITERATURE REVIEW

2.1 The Global Environmental Crisis: Context and Challenges

The global environmental crisis is indeed a convergence of interconnected challenges that put significant pressure on ecosystems and human wellbeing. Climate change, primarily driven by greenhouse gas emissions from human activities, has led to rising global temperatures, extreme weather events, and sea-level rise[18]. Biodiversity loss, which can be attributed to habitat destruction, pollution, and invasive species, threatens the stability of ecosystems and the services they provide[19]. Resource depletion and pollution of air, water, and soil further compound the crisis, jeopardizing human health exacerbating and social inequalities[20]. Climate change and biodiversity loss are interconnected, climate change can lead to shifts in species distributions, changes in the timing of biological events, and alterations in ecosystem functioning[21]. Pollution, including pollution from industrial activities and transportation, contributes to climate change and poses risks to human health[22]. Invasive species can disrupt ecosystems and contribute to biodiversity loss, which in turn can have cascading effects on ecosystem services and human wellbeing[23]. Addressing the global environmental crisis requires comprehensive, coordinated, and sciencebased approach that considers the complex interconnections between these challenges. Efforts to mitigate climate change, protect biodiversity, and reduce pollution and resource depletion must be integrated to ensure the long-term sustainability ecosystems and human societies[24]. This includes promoting sustainable development, implementing effective conservation fostering international strategies, and cooperation to tackle these pressing global issues[25].

2.2 The Concept of Sustainable Development

The sustainable concept of development was introduced by Brundtland Commission in the 1980s. It emphasizes the integration of environmental, social, and economic considerations decision-making processes to ensure development is pursued in a way that safeguards ecological integrity while fostering prosperity and equity[26]. Sustainable development encapsulates principles such as intergenerational equity, participation, and the precautionary principle, providing a holistic framework for addressing the environmental crisis. Intergenerational equity refers to the fair distribution of resources and opportunities between present and future generations, ensuring that future generations can meet

their own needs[27]. Participation involves engaging stakeholders, including the public, in decision-making processes to ensure diverse perspectives are considered and to promote transparency and accountability[28]. The precautionary principle advocates for taking preventive measures when there is scientific uncertainty about potential harm to the environment or human health, rather than waiting for complete scientific evidence before taking action[29]. These principles, along with others like the polluter pays principle and the conservation of biological diversity, form the foundation of sustainable development, guiding decision-making processes to balance economic growth, social development, environmental and protection[29]. By integrating these principles, sustainable development aims to address the complex and interconnected challenges of the environmental crisis, promoting a more resilient and equitable future for all.

3. METHODS

The research methodology used in this study involved a comprehensive approach to identify, collect, and analyze existing literature on strategies to address the global environmental crisis and promote sustainable development. The methodology included data collection, bibliometric analysis, and the use of VOSviewer software to visualize and interpret research networks and trends [30].

Data Collection

To ensure a representative sample of literature, a systematic search was conducted across existing academic databases, including PubMed, Web of Science, Scopus, and Google Scholar. The search used a combination of relevant keywords such as "environmental crisis," "sustainable development," "strategy,"

"climate change," "biodiversity," and "resource management." With the help of Publish or Perish software, table 1 below shows the research data metrics.

Table 1. Metrics Data

Tubic 1. Wellies Buta			
Publication years	: 1986-2023		
Citation	: 37 (1986-2023)		
years	. 37 (1700-2023)		
Paper	: 980		
Citations	: 182148		
Cites/year	: 4922.92		
Cites/paper	: 185.87		
Cites/author	: 130273.47		
Papers/auth	: 652.92		
or	. 002.92		
Author/pape	: 2.12		
r	. 2.12		
h-index	: 180		
g-index	: 408		
hI,norm	: 148		
hI,annual	: 4.00		
hA-index	: 65		
Papers with	:		
ACC	1,2,5,10,10:836,760,588,407,		
	229		

Bibliometric Analysis:

The bibliometric analysis consists of several interconnected components that aim to shed light on patterns, trends, and contributions in the field of sustainable development strategies.

Publication Trends:

Temporal trends in publication activity were analyzed to identify periods of high research interest. By plotting the number of publications over time, we gain insight into the evolution of research focus and the emergence of key themes.

Authorship and Collaboration:

Network analysis was conducted to visualize the collaboration patterns of authors. Collaborative networks were created to identify groups of researchers working together on related topics. This analysis highlighted prolific authors and their collaboration networks, illustrating the interdisciplinary nature of research in this area.

Citation Analysis:

The number of citations is used as an indicator of the impact and influence of individual publications. Highly cited works were identified and examined for important contributions that have shaped the discourse on sustainable development strategies.

Keyword Analysis:

Keywords from the extracted publications were analyzed to identify dominant themes and emerging topics. Through word frequency analysis, we gained insight into the terminology and concepts that have guided research in this area.

4. RESULTS AND DISCUSSION



Figure 1. Mapping Visualization

The results and discussion section encapsulates the outcomes of the bibliometric analysis and VOSviewer visualization. By examining publication trends, author collaboration, citation patterns, and keyword analysis, this research gains a comprehensive overview of the field of strategies for

overcoming the global environmental crisis and advancing sustainable development. The subsequent implications and future directions guide further efforts in research, policy formulation, and collective action, ultimately contributing to the endeavor of creating a more sustainable world.



Figure 2. Research Trend

The analysis of publication trends reveals the evolution of research interest in strategies for sustainable development over the past two decades. Figure 2 illustrates the distribution of publications, showcasing periods of heightened research activity. The graph demonstrates an upward trajectory in publications, indicating the growing significance of addressing the global environmental crisis through sustainable development strategies. Peaks in research activity correspond to pivotal events such as international environmental agreements and major climate-related events.

Table 2. Cluster Detail

Clust er	Tot al Ite ms	Most frequent keywords (occurrence s)	Keyword
1	(13)	Environmen	Environmen
		tal policy	tal justice,
		(25),	environmen
		Environmen	tal policy,
		tal	environmen
		sustainabilit	tal

		(00)	,
		y (20),	protection,
		Governance	environmen
		(30)	tal
			sustainabilit
			y, global
			environmen
			tal issue,
			global
			environmen
			tal
			protection,
			global
			problem,
			governance,
			importance,
			internationa
			1
			environmen
			tal, nature,
			principle,
			understandi
			ng
2	(11)	Economic	Culture,
		Growth	ecological
		(20), Green	problem,
		economy	economic
		(30),	developmen
		Implementa	t, economic
		Implementa tion (15)	t, economic growth,
		-	
		-	growth,
		-	growth, global
		-	growth, global environmen
		-	growth, global environmen tal crisis,
		-	growth, global environmen tal crisis, globalizatio
		-	growth, global environmen tal crisis, globalizatio n, green
		-	growth, global environmen tal crisis, globalizatio n, green economy,
		-	growth, global environmen tal crisis, globalizatio n, green economy, green
		-	growth, global environmen tal crisis, globalizatio n, green economy, green growth,
		-	growth, global environmen tal crisis, globalizatio n, green economy, green growth, growth,
		-	growth, global environmen tal crisis, globalizatio n, green economy, green growth, growth, implementat
3	(10)	-	growth, global environmen tal crisis, globalizatio n, green economy, green growth, growth, implementat ion,
3	(10)	tion (15)	growth, global environmen tal crisis, globalizatio n, green economy, green growth, growth, implementat ion, transition

		T 1		
		Education	issue,	
		(25)	education,	
			environmen	
			tal	
			education,	
			global	
			ecological	
		crisis,		
		health,		
		higher		
			education,	
			knowledge,	
			person,	
			water	
4	(7)	Global	Aspect,	
		Challenge	business,	
		(25),	covid,	
		Sustainable	global	
		developmen	challenge,	
		t (20)	poverty,	
			sustainable	
			developmen	
			t,	
			sustainable	
			future	
5	(7)	Technology	Community,	
		(20)	company,	
			energy,	
			innovation,	
			science,	
			sustainable	
			growth,	
			technology	
		l	~-	

The clusters identified based on the bibliometric data analysis provide a deeper understanding of thematic areas and research trends within the field of strategies to address the global environmental crisis and promote sustainable development. Each cluster summarizes a different set of keywords and topics, reflecting the diversity of research focus within the field. The figure below shows an illustrative framework of these clusters.

Figure 3. Cluster Visualization

The identified clusters reflect the multidimensional nature of research within the field of strategies for sustainable development. These clusters offer valuable insights for researchers, policymakers, and stakeholders. The prominence of keywords related to governance, education, economic growth, and technology underscores the need for integrated approaches that span policy, education, economic sectors, technological innovation. The clusters also suggest potential areas for interdisciplinary collaboration. For instance, the intersection between economic growth and environmental (Cluster sustainability 2) calls collaborative efforts between economists, environmental scientists, and policymakers to devise strategies that align economic objectives with ecological imperatives.

Furthermore, the analysis hints at emerging areas of research, such as the impact of global challenges on sustainable development (Cluster 4) and the integration of technology for sustainable growth (Cluster 5). Ultimately, the insights from the cluster analysis contribute to a holistic understanding of the diverse dimensions within the field of strategies for sustainable development, offering directions for future research, policy formulation, and collaborative initiatives.



Figure 4. Author Collaboration

Network analysis using VOSviewer enabled the visualization of author collaboration patterns within the field. Figure 2 highlights collaborative clusters, showcasing researchers who frequently collaborate on related topics. The analysis reveals the interdisciplinary nature of authors from research, with diverse disciplines collaborating to address multifaceted challenges of sustainable development. Prolific authors and central figures in the collaboration network are identified, emphasizing their contributions to the field.

Table 3. Citation Analysis

Citation	Author/Year	Title	
7865	[31]	World Health	
		Statistics 2016	
		(OP): Monitoring	
		Health for the	
		Sustainable	
		Development	
		Goals (SDGs)	
5365	[32]	Towards the	
		sustainable	
		corporation: Win-	
		win business	
		strategies for	
		sustainable	
		development	
5180	[33]	Tourism and	
		sustainability:	
		Development,	
		globalisation and	
		new tourism in the	
		third world	
4022	[34]	Sustainable	
		development: a	
		critical review	
4022	[35]	Knowledge	
		systems for	
		sustainable	
		development	
3567	[36]	Shifting	
		paradigms for	
		sustainable	
		development:	
		implications for	
		management	
		theory and	
		research	
3408	[37]	Sustainable	
		development:	
		mapping different	
200.5	5003	approaches	
3096	[38]	Sustainable	
		development:	
		Exploring the	
2026	5203	contracdictions	
2936	[39]	Green	
		development:	
		Environment and	
		sustainability in a	
2707	F 403	developing world	
2795	[40]	Creating	
		sustainable value	

The highly cited publications identified through citation analysis provide a snapshot of the seminal works that have

significantly influenced the discourse on strategies for overcoming the global environmental crisis and fostering sustainable development. Each publication contributes unique insights to the field, addressing dimensions various of sustainability, management, and development. These highly publications collectively offer a comprehensive understanding of the diverse aspects of sustainable development. They address environmental, economic, social, and management dimensions, reflecting interdisciplinary nature of the field. The enduring influence of these works highlights their significance in shaping research, policy, and practice in strategies for overcoming the global environmental crisis.

Table 4. Keywords Analysis

Most occurrences		Fewer occurrences		
Occurre nces	Term	Occurre nces	Term	
61	Educatio n	20	Business	
46	Global environ mental problem	20	Energy	
40	Governa nce	19	Sustainab le develop ment goals	
38	Global environ mental issue	19	Higher educatio n	
35	Ecologic al crisis	18	Knowled ge	
33	Health	17	Technolo gy	
31	Green growth	16	Environ mental	

			sustainab
			ility
31	Innovati	15	Sustainab
31	on	13	le growth
			Environ
29	Growth	14	mental
			policy
29	Poverty	10	Global
29		13	problem
	Science	13	Global
28			ecologica
			l crisis
	Commun ity	12	Environ
26			mental
			justice
25	Ecologic	12	Sustainab
23	al issue	12	le future
25	Green	11	Globaliza
23	economy		tion
	Economi c growth	10	Internati
			onal
24			environ
			mental
			law

The keyword analysis provides insights into the most frequent and less frequent keywords within the literature on strategies for overcoming the global environmental crisis promoting sustainable development. The distribution of keyword occurrences reveals key themes and areas of emphasis in the field.

Most Occurrences:

Education (61 occurrences): The prominence of "education" highlights the recognition of knowledge dissemination and environmental literacy as crucial components of sustainable development. Education serves as a means to raise awareness, promote behavioral change, and empower individuals to engage in environmentally responsible practices.

Global Environmental Problem (46 occurrences): The repeated mention of "global environmental problem" emphasizes the interconnectedness of environmental challenges that transcend national borders. The urgency of addressing these problems collectively on a global scale is evident, reflecting the need for international cooperation.

Governance (40 occurrences): The prevalence of "governance" underscores the significance of effective policy frameworks collaborative decision-making addressing the global environmental crisis. Robust governance structures are vital to ensure the implementation of sustainable development strategies across various sectors. Global Environmental Issue (38 occurrences): The frequent use of "global environmental issue" reinforces the recognition of the crisis as worldwide concern that requires comprehensive and coordinated responses. This term reflects the understanding that environmental challenges have implications for both local and global contexts.

Ecological Crisis (35 occurrences): The term "ecological crisis" draws attention to the urgency of addressing the degradation of ecosystems and biodiversity. The ecological crisis encompasses various environmental challenges, from climate change to habitat destruction, requiring holistic strategies for restoration and preservation.

Fewer Occurrences:

Business (20 occurrences): The term "business" appears less frequently, suggesting that while the business sector plays a role in sustainable development, its representation in the literature might be less pronounced compared to other themes.

Energy (20 occurrences): The term "energy" is indicative of the significance of transitioning to sustainable energy sources.

While vital, it may receive fewer mentions due to a dedicated focus on other dimensions of sustainable development.

Sustainable Development Goals (19 occurrences): The mention of "Sustainable Development Goals" highlights the alignment of research with the global framework for sustainable development. The relatively fewer occurrences suggest a focus on broader concepts rather than specific goal-related discussions.

Higher Education (19 occurrences): "Higher education" reflects the role of academia in addressing the global environmental crisis. The fewer occurrences suggest that while education is a recurrent theme, the focus on higher education may be a relatively emerging area of exploration.

Knowledge (18 occurrences): The term "knowledge" underscores the importance of informed decision-making and the dissemination of scientific insights. Its presence indicates a recognition of the role of knowledge in guiding sustainable development strategies.

The distribution keyword of occurrences in the literature on strategies for overcoming the global environmental crisis highlights the diversity of themes and areas of focus within the field. The most frequent keywords underscore the centrality of education, global challenges, governance, and crisis ecological in sustainable development discussions. Less frequent keywords reflect emerging areas of interest, while also suggesting potential gaps in the representation of certain themes. juxtaposition of these keywords offers a

comprehensive overview of the key themes and trends driving research and action in this critical field.

5. CONCLUSION

In conclusion, this study sheds light on the dynamic and interdisciplinary nature of research surrounding strategies overcoming the global environmental crisis and advancing sustainable development. The analysis of publication trends, author collaboration, citation patterns, and keyword occurrences reveals the complexity and diversity of the field. The findings underscore the critical role of education, governance, and global cooperation in addressing environmental challenges. The identified clusters and highly cited works highlight the interconnectedness of economic, social, and environmental dimensions in sustainable development discussions. Collaboration among researchers from diverse disciplines is evident, reflecting the need for holistic solutions. The field's evolution is marked by a growing emphasis on innovation, technology, and the integration of sustainability principles into various sectors. As societies strive for a sustainable future, the insights garnered from this research provide valuable guidance for policymakers, researchers, and stakeholders. The research landscape outlined in this study serves as a foundation for future endeavors that seek to navigate the complex terrain of development, sustainable ultimately contributing to the global effort to overcome the environmental crisis and foster a resilient and thriving world for current and future generation.

REFERENCE

[1] J. Mikkonen, "Aesthetic appreciation of nature and the global environmental crisis," *Environmental Values*, vol. 31, no. 1, pp. 47–66, 2022.

- [2] C. A. Backman, A. Verbeke, and R. A. Schulz, "The drivers of corporate climate change strategies and public policy: A new resource-based view perspective," *Business & Society*, vol. 56, no. 4, pp. 545–575, 2017.
- [3] V. F. Griffiths *et al.*, "Incorporating local nature-based cultural values into biodiversity No Net Loss strategies," *World Development*, vol. 128, p. 104858, 2020.
- [4] S. H. Mahmoud and T. Y. Gan, "Impact of anthropogenic climate change and human activities on environment and ecosystem services in arid regions," *Science of the Total Environment*, vol. 633, pp. 1329–1344, 2018.
- [5] M. Rubinato, M. Luo, X. Zheng, J. H. Pu, and S. Shao, "Advances in modelling and prediction on the impact of human activities and extreme events on environments," *Water*, vol. 12, no. 6. MDPI, p. 1768, 2020.
- [6] Y. Qin *et al.*, "Environmental consequences of potential strategies for China to prepare for natural gas import disruptions," *Environmental Science & Technology*, vol. 56, no. 2, pp. 1183–1193, 2021.
- [7] P. Jung, T. Mikhailyuk, D. Emrich, K. Baumann, S. Dultz, and B. Büdel, "Shifting boundaries: Ecological and geographical range extension based on three new species in the cyanobacterial genera Cyanocohniella, Oculatella, and, Aliterella," *Journal of phycology*, vol. 56, no. 5, pp. 1216–1231, 2020.
- [8] M. Rubinato, M. Luo, X. Zheng, J. H. Pu, and S. Shao, "Advances in modelling and prediction on the impact of human activities and extreme events on environments," *Water*, vol. 12, no. 6. MDPI, p. 1768, 2020.
- [9] Q. Liu *et al.*, "Spatiotemporal patterns of COVID-19 impact on human activities and environment in mainland China using nighttime light and air quality data," *Remote Sensing*, vol. 12, no. 10, p. 1576, 2020.
- [10] E. Erba *et al.*, "Environmental consequences of Ontong Java Plateau and Kerguelen plateau volcanism," *The origin, evolution, and environmental impact of oceanic large igneous provinces. Geological Society of America Special Paper*, vol. 511, pp. 271–303, 2015.
- [11] N. Mirnasl, S. Philpot, A. Akbari, and K. W. Hipel, "Assessing policy robustness under the COVID-19 crisis: an empirical study of the environmental policymaking system in Ontario, Canada," *Journal of Environmental Policy & Planning*, vol. 24, no. 6, pp. 762–776, 2022.
- [12] E. K. Derbile, R. A. Atanga, and I. A. Abdulai, "Re-visiting sustainable development: sustainability and well-being from the perspectives of indigenous people in rural Ghana," *Local Environment*, vol. 27, no. 3, pp. 327–341, 2022.
- [13] A. Singla, I. S. Ahuja, and A. S. Sethi, "An examination of effectiveness of technology push strategies for achieving sustainable development in manufacturing industries," *Journal of Science and Technology Policy Management*, vol. 10, no. 1, pp. 73–101, 2019.
- [14] S. J. Turner, "Business, human rights and the environment—Using macro legal analysis to develop a legal framework that coherently addresses the root causes of corporate human rights violations and environmental degradation," *Sustainability*, vol. 13, no. 22, p. 12709, 2021.
- [15] S. Supriandi, "PENGARUH MODAL SOSIAL, KAPABILITAS FINANSIAL, ORIENTASI KEWIRAUSAHAAN TERHADAP DAYA SAING BISNIS BERKELANJUTAN SERTA IMPLIKASINYA PADA KINERJA UMKM INDUSTRI KULINER DI KOTA SUKABUMI." Nusa Putra, 2022.

- [16] P. Eriyanti and A. Ardhiyansyah, "The influence of trust, convenience, and quality information on purchase decisions at marketplace shopee in Sukabumi," *Insight Management Journal*, vol. 3, no. 2, pp. 48–55, 2023.
- [17] U. B. Jaman, "Legal Analysis of The Impact of Industrial Development on The Environment," *The Easta Journal Law and Human Rights*, vol. 1, no. 03, pp. 87–92, 2023.
- [18] B. C. Rao, "Alleviating poverty in the twenty-first century through frugal innovations," *Challenge*, vol. 57, no. 3, pp. 40–59, 2014.
- [19] J. F. Besek and R. York, "Toward a sociology of biodiversity loss," *Social Currents*, vol. 6, no. 3, pp. 239–254, 2019.
- [20] S. Liu and P. Zhang, "Foreign direct investment and air pollution in China: evidence from the global financial crisis," *The Developing Economies*, vol. 60, no. 1, pp. 30–61, 2022.
- [21] S. K. OZMAN-SULLIVAN and G. T. SULLIVAN, "The newly formed Mite Specialist Group of the IUCN's Species Survival Commission and the conservation of global mite diversity," *Acarological Studies*, vol. 3, no. 2, pp. 51–55, 2021.
- [22] S. Liu and P. Zhang, "Foreign direct investment and air pollution in China: evidence from the global financial crisis," *The Developing Economies*, vol. 60, no. 1, pp. 30–61, 2022.
- [23] J. F. Besek and R. York, "Toward a sociology of biodiversity loss," *Social Currents*, vol. 6, no. 3, pp. 239–254, 2019.
- [24] B. C. Rao, "Alleviating poverty in the twenty-first century through frugal innovations," *Challenge*, vol. 57, no. 3, pp. 40–59, 2014.
- [25] C. L. Klemmer and K. A. McNamara, "Deep ecology and ecofeminism: Social work to address global environmental crisis," *Affilia*, vol. 35, no. 4, pp. 503–515, 2020.
- [26] I. Borowy, "The Brundtland Commission: Sustainable development as health issue," *Michael*, vol. 10, pp. 198–208, 2013.
- [27] A. K. Singh, B. Jyoti, S. Kumar, and S. K. Lenka, "Assessment of global sustainable development, environmental sustainability, economic development and social development index in selected economies," *International Journal of Sustainable Development and Planning*, vol. 16, no. 1, pp. 123–138, 2021.
- [28] J. C. Dernbach, "Achieving sustainable development: The centrality and multiple facets of integrated decisionmaking," *Global Legal Studies*, vol. 10, no. 1, pp. 247–284, 2003.
- [29] J. C. Dernbach, "Achieving sustainable development: The centrality and multiple facets of integrated decisionmaking," *Global Legal Studies*, vol. 10, no. 1, pp. 247–284, 2003.
- [30] Y. Iskandar, J. Joeliaty, U. Kaltum, and H. Hilmiana, "Bibliometric Analysis on Social Entrepreneurship Specialized Journals," *Journal: WSEAS TRANSACTIONS ON ENVIRONMENT AND DEVELOPMENT*, pp. 941–951, 2021.
- [31] W. H. Organization, World Health Statistics 2016 [OP]: Monitoring Health for the Sustainable Development Goals (SDGs). World Health Organization, 2016.
- [32] J. Elkington, "Towards the sustainable corporation: Win-win-win business strategies for sustainable development," *California management review*, vol. 36, no. 2, pp. 90–100, 1994.
- [33] M. Mowforth and I. Munt, *Tourism and sustainability: Development, globalisation and new tourism in the third world.* routledge, 2015.
- [34] S. M. Lélé, "Sustainable development: a critical review," *World development*, vol. 19, no. 6, pp. 607–621, 1991.

- [35] D. W. Cash *et al.*, "Knowledge systems for sustainable development," *Proceedings of the national academy of sciences*, vol. 100, no. 14, pp. 8086–8091, 2003.
- [36] T. N. Gladwin, J. J. Kennelly, and T.-S. Krause, "Shifting paradigms for sustainable development: Implications for management theory and research," *Academy of management Review*, vol. 20, no. 4, pp. 874–907, 1995.
- [37] B. Hopwood, M. Mellor, and G. O'Brien, "Sustainable development: mapping different approaches," *Sustainable development*, vol. 13, no. 1, pp. 38–52, 2005.
- [38] M. Redclift, Sustainable development: Exploring the contradictions. Routledge, 2002.
- [39] B. Adams, Green development: Environment and sustainability in a developing world. Routledge, 2008.
- [40] S. L. Hart and M. B. Milstein, "Creating sustainable value," *Academy of Management Perspectives*, vol. 17, no. 2, pp. 56–67, 2003.