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A Bibliometric Analysis of Best Practices on The Food Security Strategy to Economic Resilience

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ABSTRACT

Food security has remained a global concern, despite efforts in the international goal to eliminate food insecurity during the last few decades. However, the subjective dimension of food security has received little attention in food security research. **Research Methods:** This article provides detailed procedural directions for (i) combining and cleaning bibliometric data from several databases (Scopus and Web of Science) and (ii) doing bibliometric analysis with multiple tools (bibliometrix and VOSviewer). Then, We used bibliometric analytic techniques with regard to document type, subject area, author, and country of publishing. **Finding/Results:** The study's findings reflect research trends, highlight major research obstacles, and suggest prospective areas for future research in this fascinating field. **Conclusion:** The results show an increase in studies on food security strategies, especially during the Covid-19 pandemic, due to the increasing global awareness of challenges such as climate change and population growth. China is the country with the highest number of publications on food security strategies. Research on food security strategies is multidisciplinary, involving economic, environmental, and social aspects, so multidisciplinary and global collaboration is needed.

INTRODUCTION

For many people living all throughout the world, food insecurity is a serious issue that will probably get more severe as population rises. Although it impacts those with inadequate means in rich nations, it is particularly alarming in lower and middle-income countries (LMIC). Human welfare, health, and output are strongly influenced by food poverty. Dealing with food insecurity calls for a complicated mix of agricultural production, climate change, environmental damage, animal health, plant health, pests, food distribution, and resource depletion.

With the global population expected to approach 9 billion by 2050 (Barrett, 2021), it is necessary to increase efficiency in food production and distribution to ensure that global consumption needs are met. In

addition, climate change is also a significant threat to food security (Lal, 2013), which has an impact on production instability, so effective food security strategies are needed to mitigate the negative impacts of climate change and strengthen the resilience of the global food system. The impact of the COVID-19 pandemic has further exposed the weakness of global food supply chains, which triggered a massive recession and major disruptions in the food value chain (Swinnen & McDermott, 2020). Therefore, a solid food security strategy is needed to build a more resilient and sustainable food system.

Food insecurity is a global issue influenced by a variety of factors, including population growth, climate change, land degradation, and water shortages. Addressing it requires an approach that supports sustainable agriculture and efficient resource management(Barrett, 2021; Lal, 2013; Sari & Muslim, 2024). In addition, food security is closely linked to economic growth, poverty reduction, and social and political stability, making it a fundamental human right that plays an important role in improving public health and preserving the environment (Bala, 2023; Barrett, 2021). An optimal food security strategy requires comprehensive planning and policies, including target setting, risk analysis, and implementation of steps to achieve independence and improve food quality (Dyah Andrianti et al., 2024; Voronina, 2022)

All these elements fit the idea of One Health and call for the cooperation of several fields to properly solve food security. Working at local, regional, national, and global levels, One Health—defined by the U.S. Centers for Disease Control and Prevention (CDC) and The One Health Commission is a collaborative, multisectoral, and transdisciplinary approach to achieving optimal health (and well-being) outcomes that acknowledges the interconnectedness of people, animals, plants, and their shared environment.

Analysis of food security strategies is a global problem that requires a comprehensive research approach. Therefore, this study uses a bibliometric analysis approach that can identify, measure, and analyze patterns of scientific publications related to food security strategies. By analyzing research trends, the main contributors in the research, and mapping the relationship between topics, authors, and institutions in food security strategy research is expected to be a source of reference in developing science through research and providing policy advice for the government in implementing food security strategies. Based on this background, this research will analyze food security strategies using bibliometric analysis.

LITERATURE REVIEW

Sustainable Development Goals (SDGs) are a global initiative aimed at addressing extreme climate change, reduce poverty for ensuring prosperity for all and minimizing inequality worldwide in order to create a sustainable future by 2030 (Michelle & Gunawan, 2023; Sultanova, 2024). The SDGs consist of 17 global targets that address economic, social, and environmental challenges, including climate change, environmental degradation, inequality, poverty, and issues related to peace and justice (Bąk, 2024; Mahanayak, 2024; Mohanty & Kumar Panda, 2023; Jayasooria & Yi, 2023).

Food security is among the most important features of the SDGs since it directly relates to Sustainable Development Goal 2, Zero Hunger. Aiming to end hunger, attain food security, enhance nutrition, and support sustainable agriculture, SDG 2 seeks (United Nations, 2023). Reaching this objective calls for a multifarious strategy combining fair food distribution systems, resilient agricultural methods, and sustainable food production systems.

Several studies underline that by guaranteeing that everyone has consistent access to enough, safe, and nutritious food throughout the year (Armstrong & Drimie, 2024) food security greatly helps to lower global hunger. Achieving SDG 2, however, will present several difficulties including resource depletion, climate change, poor food distribution, and economic inequalities. Dealing with these issues calls for laws supporting small-scale farmers, promoting environmentally friendly agricultural innovation, and improving world food trade rules to reduce food waste and maximise resource economy.

Moreover, guaranteeing long-term food security depends critically on support of sustainable development. Adoption of climate-smart agricultural methods including precision farming, organic farming, and agroforestry—which can boost food output while safeguarding environmental resources—helps to Furthermore improving social protection mechanisms including subsidies for farmers and food aid programs will enable underprivileged groups to more successfully get food.

Policymakers and stakeholders who grasp the complex link between food security and SDG 2 can create all-encompassing plans to fight poverty and create a more resilient world food system. By means

of bibliometric analysis, identification of important research trends, and highlighting of the most influential policies in this field, this study intends to add to this debate by analysing best practices in food security strategies.

Food Security

Food security's conception has changed with time. At first, it concentrated mostly on the global sufficiency of food supply. The 1974 World Food Conference defined food security in terms of availability. However, by the 1990s, the inclusion of nutrition security became more prominent, leading to the combined term "food and nutrition security" to ensure that nutritional aspects are not overlooked in discussions and policies. (Simelane & Worth, 2020)

Although the concept of food security has evolved into Food and Nutrition Security (FNS), it is important to understand the difference between the two. Food Security is defined as the availability of sufficient food supplies to meet the nutritional needs of a population. It emphasizes the quantity of food available and the ability to access it. While Nutrition Security Goes beyond the availability of food to ensure that individuals have access to a nutritionally adequate diet that provides the essential nutrients needed for health and well-being. It emphasizes the quality of food consumed, not just the quantity. (Simelane & Worth, 2020) So in short, food security focuses on the quantity of food, while nutrition security focuses on the quality of food.

According to the 1996 World Food Summit, food security is attained when everyone, everywhere has physical and financial access to enough wholesome food to meet their nutritional needs and goals for an active and healthy life (World Bank, 2023; de Pee & Pérez-Escamilla, 2023). The theory of food security encompasses several key dimensions for individuals and communities to maintain a healthy and active life (Simelane & Worth, 2020; de Pee & Pérez-Escamilla, 2023). Therefore, for the goal of food security to be achieved, the four dimensions must be fulfilled simultaneously. There is the Four Pillars of Food Security:

1. Availability: This refers to the physical presence of food in sufficient quantities. It includes aspects such as agricultural production, food stocks, and imports.
2. Access: Access is the capacity of people and households to acquire food, which can be impacted by physical variables (like distance to markets), social factors (like distribution inside homes), and financial ones (like income and prices).
3. Utilization: This pillar focuses on how food is used by the body, which is affected by dietary diversity, food safety, and the health status of individuals. Proper utilization ensures that the nutrients in food are effectively absorbed and used by the body.
4. Stability: Food availability, access, and consumption consistency across time is known as stability. It underlines that food security has to be kept even in the face of shocks including political unrest, climatic change, or economic crisis.

Strategy Food Security

Every nation's basic objective is food security, which helps to lower reliance on outside sources in satisfying national food demand. The success of food security initiatives is intimately related with government policies, which are quite important in forming sustainable food systems. Fundamental elements influencing the Four Pillars of Food Security: availability, access, use, and stability are socio-economic, political, institutional, cultural, and environmental ones (Simelane & Worth, 2020). Furthermore, directly and indirectly influencing food security at the household level are other elements including population increase, macroeconomic conditions, technological developments, climate change, livelihood systems, and market dynamics (Simelane & Worth, 2020). Given the complexity of these issues, overcoming hurdles in reaching food security calls both a stakeholder approach. This covers institutionalising, evaluating and developing systems, education and capacity building, as well as social and political support (Siebrecht, 2020; Simelane & Worth, 2020). A vital part of this endeavour is sustainable agriculture, which guarantees long-term food availability and helps to protect environmental resources. Climate-smart farming methods, crop diversification, effective irrigation systems, and post-

harvest loss reduction comprise sustainable agriculture. These methods improve soil fertility, save water, lower greenhouse gas emissions, and boost food output, so strengthening the resilience of the food system.

To support SDG 2 (Zero Hunger) and enhance food security several multinational initiatives and policies have been launched. The World Food Program (WFP) is one of the most well-known projects since it supports smallholder farmers, offers food aid, and advances nutrition campaigns in areas of food shortage. Working closely with governments, WFP develops sustainable agricultural solutions including local food supply chains enhancement, improvement of food storage infrastructure, and promotion of drought-resistant crops. WFP enables underdeveloped areas to attain long-term food security and resilience against environmental and economic shocks by combining sustainable agriculture with food aid programs.

In addition, several countries have adopted strategic policies to strengthen their food security frameworks:

- Sweden has developed a comprehensive food strategy to foster a competitive food production industry while promoting innovation, employment, and sustainable growth. The strategy includes key objectives such as strengthening the competitiveness of the food supply chain, promoting sustainable agricultural practices, and increasing consumer awareness of sustainable food choices (Government Offices of Sweden, 2016).
- France has established an international strategy for food security, nutrition, and sustainable agriculture, which focuses on strengthening global food security governance, developing sustainable agricultural practices, and supporting sustainable agri-food chains. The strategy also emphasizes enhancing food assistance programs for vulnerable populations and improving their resilience (Ambassade De France En Indonésie, 2022).
- The United Kingdom (UK) has introduced the National Food Strategy, which aims to transform the food system by promoting sustainable agriculture, reducing food waste, and improving nutritional diversity. The policy also addresses trade regulations to ensure that imported food meets high standards of safety, environmental sustainability, and animal welfare (National Food Strategy, 2021).

These policy initiatives demonstrate that achieving food security requires a holistic and integrated approach involving economic, environmental, and social strategies. By analyzing different national strategies and global initiatives such as WFP, valuable insights can be gained for developing effective and sustainable food security policies in other regions.

RESEARCH METHODS

Bibliometric Analysis Methods

Bibliometric analysis methods are increasingly developing and are widely used in various scientific research. Bibliometric analysis is a systematic study of academic literature to identify trends, patterns, and characteristics in a particular field (Passas, 2024). As of right now, bibliometrics is becoming a more widely used tool for specialized research and is an essential component of the methodology for research evaluation, particularly in the fields of terapan and ilmiah (Ellegaard & Wallin, 2015). In accordance with the research problem, the subjective dimension of food security has received little attention in the food security literature. Then by using bibliometric analysis we can examine and assess a large amount of scientific data so that we can obtain literature related to food security strategies. The steps in the bibliometric approach include data collection from relevant basic data, data analysis and refining, and application of various bibliometric techniques to the data to create accurate information. (Passas, 2024). In this study, the basic data We used bibliometric analytic techniques with regard to document type, subject area, author, and country of publishing.

Procedural Guideline

This article provides detailed procedural directions for combing and cleaning bibliometric data from several databases (Scopus and Web of Science), as well as doing bibliometric analysis using multiple tools (bibliometrix and VOSviewer), as explained below:

1) Combing And Cleaning Bibliometric Data

In bibliometric research, combing and cleaning bibliometric data from multiple databases is an important step taken so that the data that has been collected can be analyzed. This is an essential phase to guarantee that the analysis conducted is accurate and that the reality acquired from the literature investigated is valued. This work made use of Scopus and Web of Science (WOS) among several databases. Scopus and Web of Science (WOS) were selected since they offer several benefits for bibliometric study. Extensive scientific publications abound based on both of the data bases; Scopus offers more complete data and original papers in the pertinent field, such partnerships and community involvement (Salouw et al., 2024). While Scopus has an advantage in general citation coverage up to the last few years, Web of Science (WOS) is advised because of its accuracy in backward citation links (Gusenbauer, 2024; Gerasimov et al., 2024). Studies concentrating on particular medical disciplines, such bone grafting, which revealed notable changes in skeletal muscle and tendon, show that the complete Scopus dataset enables more thorough bibliometric analysis. (Salouw et al., 2024; Siron et al., 2024). Furthermore, thorough Scopus data on publishing patterns and production can assist in the identification of the work of eminent and active authors. (Siron et al., 2024). This is certainly very important for mapping research progress. Therefore, Web of Science (WOS) and Scopus are valuable tools for conducting comprehensive bibliometric analysis as they provide information that can be used for literature review and conceptual understanding.

2) Conducting Bibliometric Analysis

After combing and cleaning bibliometric data, the next is conducting bibliometric analysis using multiple tools. This research uses bibliometric and VOSviewer to perform the quantitative and visual analysis of strategy food security. Bibliometric and VOSviewer analysis allows a quantitative assessment of the number of publications in a particular research field, which serves as an indicator of the development and growth of that field over time (Kandeel et al., 2023). The many research results on food security strategies, but the subjective dimension of food security has not received much attention in the food security literature. Bibliometrics is often used to summarize the most representative findings from a collection of academic papers including authors' subjects, sources, and the most referenced papers, nations, journals, and institutions in the literature (Kaurav & Gupta, 2022; Ullah et al., 2023) By conducting comprehensive data compilation, it helps in tracing the evolution of the topic and its implications in both academic and public spheres (Kandeel et al., 2023). This also helps to develop scientometric literature from specialized research, such as systematic reviews and meta-analyses, in the relevant field, and provides information about publishing schedules, author productivity, and response times to research questions (Fu et al., 2023). Bibliometric and VOSviewer is also a research method that can provide visual representation, it allows visualization of citation networks and co-authorship relationships (Kandeel et al., 2023). VOSviewer has been used effectively to visualize the relationships between the author and the reader, revealing clusters and trends in research areas such as the support and performance of the organizations involved (Ye, 2018; Effendi et al., 2021). By using the bibliometric and VOSviewer, thus providing insight into connections and developments in knowledge about strategy food security. In general, the combination of Bibliometric with VOSviewer improves the clarity and rigor of bibliometric studies, making them very valuable for researchers who wish to examine complex archival materials (Ricardo et al., 2024)

RESULT AND DISCUSSION

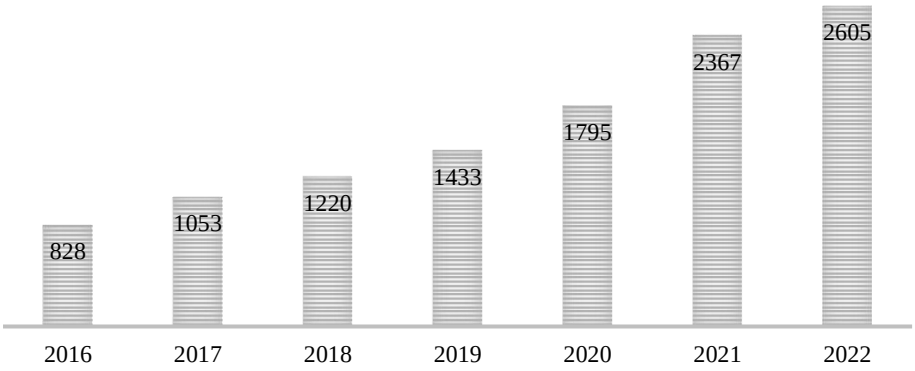
Publications on the topic by year

The sample shows a fairly dramatic increase in publications on the topic of the green economy between 2016 and 2022 (Figure 2). The most significant increase occurred from 2020 to 2021, with an increase of 31%. This reflects the large number of studies discussing environmental issues as part of the green economy that were conducted during the COVID-19 pandemic. The COVID-19 pandemic has exposed the fragility of Global Food Supply Chains (FSCs) ranging from the flow of food from the agricultural sector and producers to consumers as well as disruptions to domestic and international trade (Alabi & Ngwenyama, 2023; Nasereldin et al., 2021).

The increasing research on food security strategies shows the increasing awareness of the global community towards food security issues. This awareness is influenced by various factors, one of which is

climate change which is a serious threat to world food security (Sweileh, 2020). The impact of climate change on food production is very significant, especially in countries that depend on rainfed agriculture (Gebre et al., 2023). In addition, the world faces major challenges in achieving food security, especially with the increasing population which is expected to exceed 9 billion people in the next few decades (Barrett, 2021; Lal, 2013). To meet this challenge, various strategies are needed that emphasize technological advances, Market-based interventions, social protection programs, community-based efforts, and policy reforms to ensure long-term food security.(Sari & Muslim, 2024)

Figure 1. Publications on topic by year



Source: Author

Sample trends by region

The descriptive statistics from the samples show that articles on the green economy concept were published in 87 countries (Figure 3). Of the 87 countries, China accounts for the most research in this field, with a total of 241 articles. This shows China's great focus on food security. Food security has long been a major concern in China due to its large population and limited agricultural land (Wang, 2019). As the world's largest food producer, China faces significant pressure to maintain food security while supporting sustainable agricultural development (Lee et al., 2023). To address these challenges, China is implementing a national strategy focused on sustainable agricultural land use and technological innovation to strengthen its food security (Y. Zhang & Lu, 2022). Among them is by formulating strategic policies for food security such as the protection of 1.8 billion MU of arable land, the restriction of permanent basic agricultural land, and the development of high-quality agricultural land, so as to successfully overcome food shortages and poverty alleviation (L. C. Zhang & Fan, 2020). China's food security strategy includes a variety of measures, including changing and adapting agricultural policies through the use of technology to increase agricultural production, optimal management of natural resources to maintain food supply stability, and improving distribution efficiency to strengthen food supply chains across the country. In addition, China also encourages in-depth research and international collaboration, as well as adopts modern technology to improve crop yields and agricultural productivity (Xie et al., 2021)

There is a big difference between the articles published by China and those published by other countries. The distribution of these publications indicates a global imbalance in attention to food security strategies. China has emerged as a major leader in this research, while many other countries have had more limited involvement in developing strategies to address food security challenges.

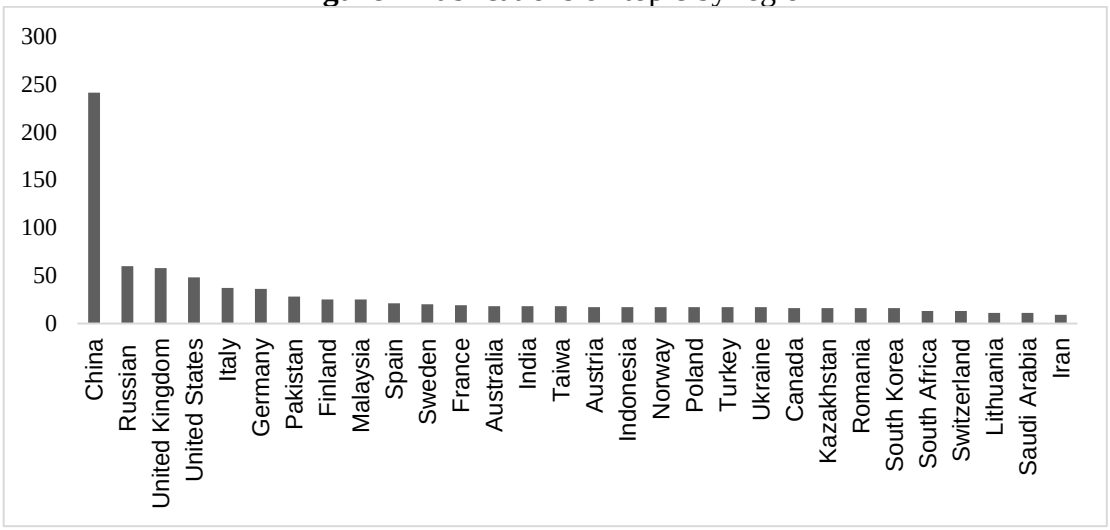
Article type

Only publications in journals or books are included in our sample (Figure 4). These publication types are considered to have a fairly high level of accuracy and judgment compared to other types. Journals and books are also the sources most frequently consulted by researchers and policymakers. In figure 4, it shows that the source of the article is mostly obtained from journals, which is as much as 96%. This proportion shows that journals are the main source of research related to food security strategies. This is because journals are the main medium for publishing original research and presenting data-driven conclusions (Van Dijk, 2019). Journals are also a credible source of scientific information, because most journals go through a peer

review or editorial review process (Silveira, 2022). With regular publications, journals provide up-to-date updates on research developments in various scientific fields (Van Dijk, 2019).

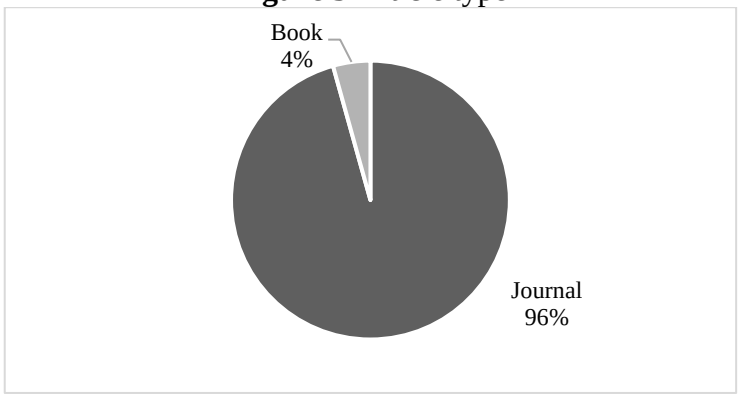
The dominance of journals as a publication medium also reflects the tendency of academics and researchers to disseminate their latest findings quickly and systematically. This is important in the field of food security, considering global dynamics such as climate change, population growth, and economic instability that can directly affect food policy.

Figure 2 Publications on topic by region



Source: Author

Figure 3 Article type



Source: Author

Subjects covered

According to our assessment, 21 subjects are addressed in the sample publications. Most of the publications are in journals in fields other than economics. This is due to the connection between economic, environmental, and social issues. Economic issues such as food security strategies often intersect with other issues such as environmental and social. The data illustrate the distribution of research articles on food security strategies across various academic disciplines. Research in environmental science leads with 494 articles, followed by social sciences with 344 articles. This highlights the strong connection between food production and its environmental impact, as well as social factors such as employment, community well-being, and the effects of climate change on food production.

Food security is closely related to economic growth, poverty alleviation, and social and political stability. As a fundamental human right, food security plays an important role in maintaining public health and protecting the environment (Bala, 2023; Barrett, 2021). This shows that collaboration between research disciplines on food security strategies is still very relevant to be carried out to achieve research objectives.

In addition to collaboration between disciplines, collaboration between countries also needs to be carried out, considering that the issue of food security is a global problem not only in one region. Some

countries, such as China, have adapted external resources into their national policies to strengthen the domestic agricultural sector and contribute to global governance related to food security (Smirnova, 2024).

Based on data from the subjects covered in the sampled publications, food security strategy is confirmed to be a multidimensional issue. It is primarily examined from environmental, social, economic, and energy perspectives, with ongoing advancements in technological innovation and management policies playing a crucial role in its development.

Table 1. Subjects covered in sampled publications

Subject	Number of articles
Environmental Science	494
Social Sciences	344
Energy	237
Economics, Econometrics, and Finance	140
Business, Management, and Accounting	118
Engineering	99
Computer Science	58
Medicine	45
Agricultural and Biological Sciences	40
Earth and Planetary Sciences	26
Psychology	17
Arts and Humanities	13
Mathematics	13
Decision Sciences	11
Biochemistry, Genetics, and Molecular Biology	5
Physics and Astronomy	4
Chemical Engineering	3
Chemistry	3
Materials Science	3
Pharmacology, Toxicology, and Pharmaceutics	3
Multidisciplinary	1

CONCLUSION

The findings in this literature review indicate that research on the food security strategy has increased significantly, especially during the COVID-19 pandemic, reflecting increasing global awareness of challenges such as climate change and population growth. Effective strategies include technological innovation, market policies, and social protection to ensure sustainable food security. China is a major contributor to the study, in line with its efforts in technological innovation and sustainable agriculture policies. Scientific Journals are the main source used in this research because they have a high level of credibility and go through a peer review process. Food security is not only related to the economy, but also environmental and social aspects, so it requires a multidisciplinary approach and international cooperation. Countries such as China have adapted external resources to strengthen domestic food security and contribute to global governance, underscoring the importance of collaboration in addressing the challenges of world food security.

Suggestions for further research are to explore multidisciplinary approaches and international collaboration, especially in supporting developing countries in adopting more sustainable agricultural practices so that optimal resilience strategies are achieved.

References

Alabi, M. O., & Ngwenyama, O. (2023). Food Security and Disruptions of the Global Food Supply Chains During COVID-19: Building Smarter Food Supply Chains for the Post-COVID-19 Era. *British Food Journal*, *125*(1), 167–185. https://doi.org/10.1108/BFJ-03-2021-0333

Bala, R. (2023). Food Security for Sustainable Future: Challenges, Strategies and Solutions. *International Journal For Multidisciplinary Research*, *5*(6). https://doi.org/10.36948/ijfmr.2023.v05i06.8868

Barrett, C. B. (2021). Overcoming Global Food Security Challenges through Science and Solidarity. *American Journal of Agricultural Economics*, *103*(2), 422–447. https://doi.org/10.1111/ajae.12160

Dyah Andrianti, Eva Claudia Boru Lubis, Kiki Nuridayanti, & Endar Purnawan. (2024). Food security strategy National Food Security Strategy To Improve Economic Independence and Competitiveness In The Framework Of National Resilience. *Southeast Asia Journal of Graduate of Islamic Business and Economics*, *2*(3), 100–105. https://doi.org/10.37567/sajgibe.v2i3.3039

Effendi, D. N., Irwandani, Anggraini, W., Jatmiko, A., Rahmayanti, H., Ichsan, I. Z., & Mehadi Rahman, M. (2021). Bibliometric analysis of scientific literacy using VOS viewer: Analysis of science education. *Journal of Physics: Conference Series*, *1796*(1), 012096. https://doi.org/10.1088/1742-6596/1796/1/012096

Ellegaard, O., & Wallin, J. A. (2015). The bibliometric analysis of scholarly production: How great is the impact? *Scientometrics*, *105*(3), 1809–1831. https://doi.org/10.1007/s11192-015-1645-z

Fu, Y., Mao, Y., Jiang, S., Luo, S., Chen, X., & Xiao, W. (2023). A bibliometric analysis of systematic reviews and meta-analyses in ophthalmology. *Frontiers in Medicine*, *10*. https://doi.org/10.3389/fmed.2023.1135592

Gerasimov, I., KC, B., Mehrabian, A., Acker, J., & McGuire, M. P. (2024). Comparison of datasets citation coverage in Google Scholar, Web of Science, Scopus, Crossref, and DataCite. *Scientometrics*, *129*(7), 3681–3704. https://doi.org/10.1007/s11192-024-05073-5

Gusenbauer, M. (2024). Beyond Google Scholar, Scopus, and Web of Science: An evaluation of the backward and forward citation coverage of 59 databases' citation indices. *Research Synthesis Methods*. https://doi.org/10.1002/jrsm.1729

Kandeel, M., Morsy, M. A., Abd El-Lateef, H. M., Marzok, M., El-Beltagi, H. S., Al Khodair, K. M., Albokhadaim, I., Venugopala, K. N., Al-Rasheed, M., & Ismail, M. M. (2023). A century of "anticoccidial drugs": bibliometric analysis. *Frontiers in Veterinary Science*, *10*. https://doi.org/10.3389/fvets.2023.1157683

Kaurav, R. P. S., & Gupta, P. (2022). Trends in Multidiscipline Management Research: Past, Present and Future of FIIB Business Review. *FIIB Business Review*, *11*(4), 382–404. https://doi.org/10.1177/23197145221136966

Lal, R. (2013). Food Security in a Changing Climate. *Ecohydrology & Hydrobiology*, *13*(1), 8–21. https://doi.org/10.1016/j.ecohyd.2013.03.006

Lee, C.-C., Zeng, M., & Luo, K. (2023). Food Security and Digital Economy in China: A Pathway Towards Sustainable Development. *Economic Analysis and Policy*, *78*, 1106–1125. https://doi.org/10.1016/j.eap.2023.05.003

Nasereldin, Y. A., Brenya, R., Bassey, A. P., Ibrahim, I. E., Alnadari, F., Nasiru, M. M., & Ji, Y. (2021). Is the Global Food Supply Chain during the COVID-19 Pandemic Resilient? A Review Paper. *Open Journal of Business and Management*, *09*(01), 184–195. https://doi.org/10.4236/ojbm.2021.91010

Nizam Siron, K., Kow, R. Y., Md Amin, N. A. N., Low, C. L., Wahid, A. N., Jasni, F., Abidin, M. R., & Mustfar, S. N. S. (2024). Shoulder Arthroplasty: A Bibliometric Analysis Using the Scopus Database. *Cureus*. https://doi.org/10.7759/cureus.61613

Passas, I. (2024). Bibliometric Analysis: The Main Steps. *Encyclopedia*, *4*(2), 1014–1025. https://doi.org/10.3390/encyclopedia4020065

Ricardo, V. A., Irfan Rifai, A., Savitri, A., & Prasetijo, J. (2024). A Bibliometric Analysis of Drinking Water Distribution In Coastal Areas Using Vosviewer. *Asian Journal of Social and Humanities*, *2*(9), 1991–1999. https://doi.org/10.59888/ajosh.v2i8.335

Salouw, E., Setiawan, B., Roychansyah, M. S., & Sarwadi, A. (2024). Bibliometric Analysis of Tourism and Community Participation Research: A Comparison of Scopus and Web of Science Databases.

International Journal of Sustainable Development and Planning, *19*(4), 1415–1422. https://doi.org/10.18280/ijsdp.190419

Sari, R., & Muslim, M. (2024). Strategies for Improving Local Food Security in Developing Countries. *Advances in Community Services Research*, *2*(2), 98–110. https://doi.org/10.60079/acsr.v2i2.364

Silveira, P. L. (2022). *Academic publishing*. https://doi.org/10.31219/osf.io/mbyxs

Smirnova, V. A. (2024). The Role of International Cooperation in the Chinese Food Security Strategy. *Problemy Dalnego Vostoka*, *4*, 45–58. https://doi.org/10.31857/S0131281224040041

Sweileh, W. M. (2020). Bibliometric analysis of peer-reviewed literature on food security in the context of climate change from 1980 to 2019. *Agriculture & Food Security*, *9*(1), 11. https://doi.org/10.1186/s40066-020-00266-6

Swinnen, J., & McDermott, J. (2020). Covid-19 and Global Food Security. *EuroChoices*, *19*(3), 26–33. https://doi.org/10.1111/1746-692X.12288

Ullah, I., Safdar, M., Zheng, J., Severino, A., & Jamal, A. (2023). Employing Bibliometric Analysis to Identify the Current State of the Art and Future Prospects of Electric Vehicles. *Energies*, *16*(5), 2344. https://doi.org/10.3390/en16052344

Van Dijk, C. N. (2019). Shoulder Crane: A New Paradigm. *Journal of ISAKOS*, *4*(2), 59–60. https://doi.org/10.1136/jisakos-2019-000294

Voronina, N. P. (2022). Strategic Planning for Food Security. *Courier of Kutafin Moscow State Law University (MSAL))*, *5*, 59–70. https://doi.org/10.17803/2311-5998.2022.93.5.059-070

Wang, Y. (2019). The Challenges and Strategies of Food Security under Rapid Urbanization in China. *Sustainability*, *11*(2), 542. https://doi.org/10.3390/su11020542

Xie, H., Wen, Y., Choi, Y., & Zhang., X. (2021). Global Trends on Food Security Research : *Global Trends on Food Security Research: A Biblometric Analysis*, *10*(2), 119.

Ye, C. (2018). Bibliometrical Analysis of International Big Data Research: Based on Citespace and VOSviewer. *2018 14th International Conference on Natural Computation, Fuzzy Systems and Knowledge Discovery (ICNC-FSKD)*, 927–932. https://doi.org/10.1109/FSKD.2018.8687153

Zhang, L. C., & Fan, Y. C. (2020). A study on the local government bonds supporting the policy of "storing grain in the land." *Econ. Rev. J*, *10*, 124–130.

Zhang, Y., & Lu, X. (2022). A Comprehensive Evaluation of Food Security in China and Its Obstacle Factors. *International Journal of Environmental Research and Public Health*, *20*(1), 451. https://doi.org/10.3390/ijerph2001045