

## ONE DECADE OF RURAL POVERTY IN THE WORLD: A BIBLIOMETRIC ANALYSIS

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## **ABSTRACT**

Poverty by territory is classified into urban and rural poverty, with rural areas in many countries experiencing higher poverty levels. Rural poverty arises from diverse factors, leading to varying findings across studies. This research analyzes the development of rural poverty studies over the last decade (2012–2022) and examines word co-occurrence patterns within that literature. Using a bibliometric method, data were collected through Publish or Perish based on selected keywords, followed by data screening, bibliometric mapping, visualization, and interpretation. The analysis shows that publication trends on rural poverty fluctuated, with the highest number of studies appearing in 2021 (7 articles or 13.73%). Citation trends peaked for articles published in 2015 (299 citations or 14.18%). Vosviewer's co-occurrence mapping identified five thematic clusters related to rural poverty, encompassing concepts such as microfinance, food security, climate change, water, vulnerability, energy poverty, rural households, and income inequality. These findings offer insights for shaping rural poverty alleviation policies. However, the study's broad, cross-country scope presents a limitation; future research could focus on a single country. Additionally, the use of general keywords ("rural poverty") suggests an opportunity for more targeted analyses using specific terms, such as government programs for rural poverty reduction.

**Keywords:** rural, poverty, bibliometric

## INTRODUCTION

Poverty is a major development problem faced by countries in the world. Poverty is a common phenomenon in the world today and be a big business (Banerjee, 2017). The poverty alleviation program is a priority program set by the leaders of countries in the world called the Millennium Development Goals (MDGs) which were set from 2000 to 2015. The problem of poverty is still a major issue in development so that the continuation of the MDGs sustainable development goals (SDGs) program still puts poverty alleviation as the first priority (Griggs et al., 2013). Poverty is viewed from a geographical aspect into urban and rural poverty. Poverty is a major problem limiting rural sustainable development (Liu & Xu, 2016). The findings of several relevant research and sources state that the number of poor people in rural areas is higher than in urban areas (BPS, 2022). Rural poverty is directly related to the availability, quality, and utilization of land resources (Liu & Xu, 2016). Rural poverty is not only greater but has deeper roots than urban poverty (Weeks, 2018).

Research on rural poverty reduction has been carried out for several decades with inconsistent findings. The findings of various researches that analyze the determinants of poverty in rural areas and poverty reduction efforts include geographical factors that are the main determinants of poverty in rural areas in China. The measurement of poverty in rural areas used is a multi-dimensional approach. The rural poor are concentrated and distributed in geographical areas with poor natural conditions. Climate variability, especially in dryland areas, is a trigger for poverty for farmers in rural areas (Liu & Xu, 2016). Extreme weather is prone to cause farmers to fail to harvest, causing losses, and increasing the poverty rate of farmers in Africa. Carrying out risk management in the face of extreme weather changes is an effort made to reduce poverty of farmers in rural areas (Hansen et al., 2019). Adopting an ethnographic micro-level approach was carried out to understand the role of the presence of microfinance institutions in reducing poverty in rural areas. The results of the analysis show that the presence of microfinance institutions increases the high debt of rural communities that are already poor and worsens their economic vulnerability. It can be stated that the presence of microfinance institutions in rural areas has failed to alleviate poverty in rural areas (Banerjee, 2017).

Infrastructure development in the form of roads has been found to reduce poverty in rural areas. The presence of roads that connect one village with another village in India causes the smooth distribution of agricultural products, so that the price of products becomes cheaper, the products available in the market are more diverse because non-local products can enter other village markets (Aggarwal, 2018). Land engineering innovations, managing barren hilly soils, sewer soils, sandy soils, and construction land with holes, managed into agricultural land, make the quantity and quality of agricultural land increase. This condition pushes farmers in rural areas out of poverty (Liu, 2020). Urbanization is one of the causes of the decrease in poverty rates in rural areas. The impact of poverty reduction from urbanization occurs through the effect of economic linkages rather than through the direct transfer of the rural poor to urban areas. Villagers who go to the city and get jobs outside the agricultural sector can help the family economy (Cali & Menon, 2013). Various research findings on rural poverty using different approaches are the motivation for this research. The purpose of this study is to analyze: *first*, the development of research on rural poverty over the last decade/ten years (2012-2022). *Second*, the relationship between words (co-occurrence) of rural poverty research in 2012–2022. This research is expected to be a reference for research on rural poverty and a consideration in overcoming rural poverty.

## **LITERATURE REVIEW**

Poverty is a condition of financial, social, and spiritual helplessness experienced by limited resources owned by a person both individually and in groups. Poverty is essentially the inability to meet certain basic needs such as food, clothing, and shelter (Adji et al., 2020). Some other definitions of poverty include referring to the definition put forward by the Central Agency for Statistics, Poverty is the inability to meet the minimum standards of basic needs, which include food and non-food needs. Poverty is a pronounced deprivation in well-being. Poverty is related to, but distinct from, inequality and vulnerability. Inequality focuses on the distribution of attributes, such as income or consumption, across the whole population. In the context of poverty analysis, inequality requires examination if one believes that the welfare of individuals depends on their economic position relative to others in society. Vulnerability is defined as the risk of falling into poverty in the future, even if the person is not necessarily poor now; it is often associated with the effects of “shocks” such as a drought, a drop in farm prices, or a financial crisis. Vulnerability is a key dimension of well-being since it affects individuals’ behavior in terms of investment, production patterns, and coping strategies, and in terms of the perceptions of their situations (Brier & Lia Dwi Jayanti, 2020).

The two types of poverty are absolute and relative poverty. Absolute poverty is defined as a situation in which the individual's basic needs are not covered, in other words, there is a lack of basic goods and services (normally related to food, housing and clothes). Relative poverty locates the phenomenon of poverty in the society under study. From this perspective, a person is considered poor when they are in a clearly disadvantaged situation, either financially or socially, with regards other people in their environment. This idea of poverty is closely linked to the notion of inequality (Poverty and Its Measurement, n.d.).

## **METHOD, DATA, AND ANALYSIS**

This study uses a bibliometric analysis method. Bibliometric analysis is one of the best tools used by researchers to analyze the production of publications and research trends in various fields. Bibliometrics can determine the intended target by grouping the target and analyzing the results obtained to make meaningful meaning (Qin et al., 2020). Bibliometric analysis is used to examine assumption-based data to inform the results of data searches on peers. Bibliometric analysis supports the development of knowledge to delve into a specific topic. Bibliometric analysis focuses on sources derived from scientific research (Farida, 2020). Bibliometric analysis is carried out to see the development of research on a topic. Bibliometric analysis has been widely used in literature research activities. Bibliometrics is a combination of mathematical and statistical methods aimed at identifying patterns in the literature. Bibliometric analysis is a rigorous and systematic analysis by identifies qualitative and quantitative changes in the research topic (Misra et al., 2016). Bibliometric analysis explores scientific data, focusing on a defined area of field (Donthu et al., 2021). The paper reviewed is a publication on a Scopus-indexed database. Scopus has recently become the most used and reliable database for scientific publications (Singh, 2021). The data is downloaded through the Publish or Perish application.

The stages of this research are explained as follows:

## Data search

The source of research data uses article data from journals indexed by Scopus. Scopus was used for the literature search since it has a relatively larger coverage of publication sources (and thus higher numbers of citations for the selected articles) (Qin et al., 2020). Data was collected using Harzing Publish or Perish (PoP) software type 8.8.4275.8412. The selection of literature is determined by determining titles and keywords. The title and keywords set in the PoP software to collect data on this study are *rural poverty*, taking into account the inclusion criteria. The determination of inclusion criteria is intended to obtain relevant data of good quality. The inclusion criteria are presented in Table 1.

Table 1. Inclusion Criteria

Criterion	Inclusion
Period	2012-2022
Language	English
Subject area	Rural areas
Types of publications	Journal (full text available)
Themes of journal content	Rural poverty
Accessibility	Free

Source: Writer's Thoughts

The results of data tracing with PoP software found 200 papers that wrote about rural poverty with a total of 9,334 citations, over the last 10 years (2012-2022). The procedure for data collection and extraction is presented in Figure 1.

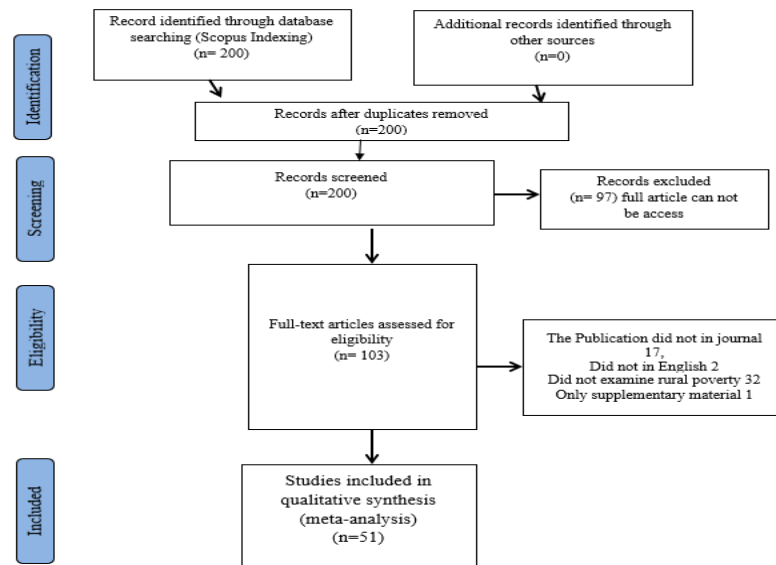


Figure 1. Data collection procedure

## Bibliometric analysis and information visualization

The next stage is data processing from selected sources. Data processing uses the VOSviewer software. The VOSviewer software is a software that can be obtained for free. This software, developed by

Eck and Waltman, has been widely used in scientific writing (Tang et al., 2018). The VOSviewer software is able to present the relationship between data with a good visual display that supports the data analysis process. The data analysis process uses data stored in the form of RIS (Strandberg et al., 2018).

The data processing process begins with the selection of the data type, followed by the process of uploading the selected data. There is a data verification process to select the data to be displayed. The selection is carried out to obtain a suitable picture. The researcher selected the data and conducted a keyword co-occurrence analysis using the VOSviewer approach (Rejeb et al., 2020; Shen et al., 2022; Widowati & Tyas, 2024). The results of the data analysis are shown in the form of relationships with the help of node symbols (small circles) and lines. There are two variants of lines in the visual display, namely straight lines and curved lines. The results of the study can be seen in the form of network visualization, overlay visualization and density visualization (Pasin & Pasin, 2022).

### **Bibliometric analysis discussion**

An analysis visualization showing the bibliometric network, presented with the help of the VOSviewer Version 1.6.5 application. VOSviewer is an easy-to-use tool for mapping large bibliometric data (Qin et al., 2020). VOSviewer is a user-friendly tool for mapping large bibliometric data (Xiao & Watson, 2019). The results of the research through VOSviewer can be seen in the form of network visualization, overlay visualization and density visualization (Pasin & Pasin, 2022). The results of data processing obtained include data on the number of publications and citations of articles, article development and citation rates, relationships between researchers and data on the development of research topics based on co-occurrence.

The citation rate indicates how much a study has been referenced for other studies, the higher the citation rate indicates that the study is a strong reference for other studies. The results of data processing on the number of publications show the development of research in terms of quantity; the higher the number of articles published, the stronger the research interest in the theme (Naseer et al., 2022). Article development data shows the progress of the research that has been carried out. The results of the co-occurrence data show the relationship between the keywords that are the main subjects of the research. The results of processing co-occurrence data based on clusters are intended to strengthen the explanation formed in the occurrence.

## **RESULT AND DISCUSSION**

### **Development of Publications and Citations**

The publication that analyzed rural poverty for ten years from 2012-2022 in terms of numbers fluctuated from year to year. The highest number of research in 2021 was seven articles or 13.73 percent and the lowest number in 2022 was one article or 1.96 percent. The research articles that are the sample of this research are 51 research results that review the determinants of rural poverty from 2012-2022, resulting in a total of 2,109 citations. The highest number of citations in 2015 was 299 citations or 14.18 percent. The lowest number of citations in the 2022 study was 21 citations or 1 percent. The statistical descriptive results are presented in Table 2, and in the form of graphs are presented in Figure 2.

Table 2. Descriptive statistical results

Year	Number of articles	Percentage (%)	Number of Citations	Percentage (%)	Average Citations per article
2012	6	11,76	240	11,38	40
2013	5	9,80	177	8,39	35,4
2014	2	3,92	102	4,84	51
2015	6	11,76	299	14,18	49,83
2016	3	5,88	282	13,37	94
2017	5	9,80	154	7,30	30,8
2018	6	11,76	231	10,95	38,5
2019	6	11,76	261	12,38	43,5
2020	4	7,84	145	6,88	36,25
2021	7	13,73	197	9,34	28,14
2022	1	1,96	21	1,00	
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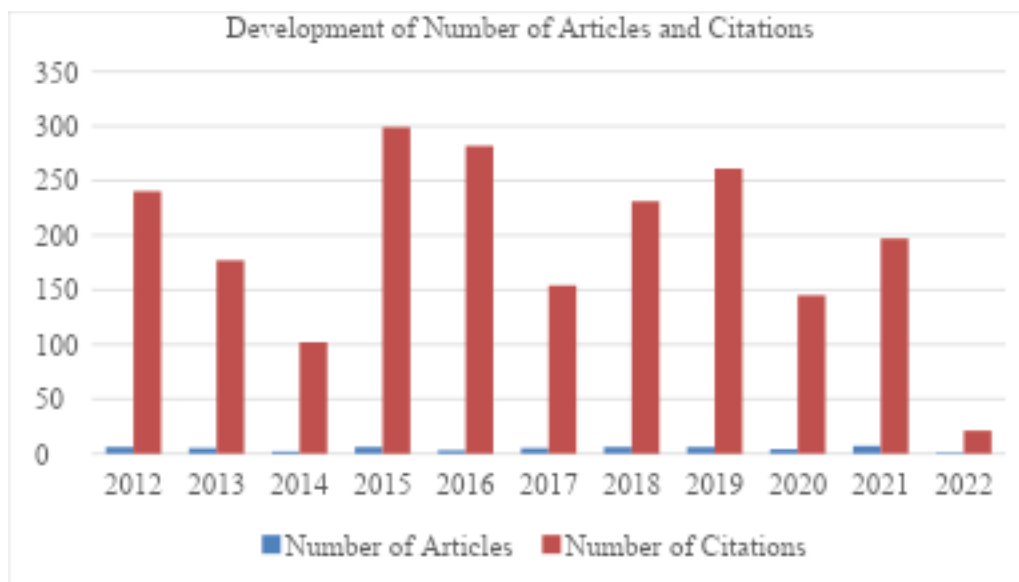


Figure 2. Descriptive statistical results

The descriptive statistical data in Table 2 also shows the average citations per article each year. The highest average article citation is an article in 2016, which is a total of 282 citations with a total of 3 articles, so that one article is cited an average of 94 times.

The top three citations are as follows: the first highest citation ranking is an article titled A geographic identification of multidimensional poverty in rural China under the framework of sustainable livelihoods analysis (Liu, 2016). This article has a citation count of 143. This study uses multidimensional poverty measurements, conducted in 655 districts in China, with 141,000,000 rural populations. The findings of the study state that the main cause of poverty among rural residents in the study site is due to poor natural conditions.

The second highest citation ranking of the article is titled Spatial restructuring through poverty alleviation resettlement in rural China (Lo, 2016). This article conveys that there has been a decline in the amount of agricultural land and rural habitats as a result of urbanization and industrialization. Vast rural land, usually on the outskirts of the city, is taken over, cleared, subdivided by the local government, and sold to property developers. The loss of fertile farmland, and the resulting unsustainable food security that the author implicitly conveys as the cause of rural poverty in China's Shanxi Province. This article further analyzes rural poverty alleviation programs carried out by local governments. The rural poverty alleviation program analyzed by the researcher in the article is called Poverty alleviation resettlement (PAR). PAR has two spatial forms: long-distance resettlement, which moves residents to a town or town, and short-distance resettlement, which moves residents within the administrative boundaries of their village or to a nearby village. This article finds that PAR programs are influential poverty alleviation strategies with significant spatial implications for rural China. The PAR program lifts the poor out of the poverty line, and has had a positive impact on improving housing, infrastructure, and facilities conditions.

The third highest citation ranking is an article titled Climate change and poverty: Building resilience of rural mountain communities in South Sikkim, Eastern Himalayas, India (Barua, 2014). This article reviews research on poverty alleviation in rural India. The poverty of the people around the Himalayas according to this article is due to their vulnerability to climate change. The study highlights that the vulnerability of study areas to climate change is not concentrated on physical or geographical factors alone, but mostly on socioeconomic factors such as lack of access to education, health care. The study respondents stated that non-climate factors act as barriers for them to overcome poverty and contribute to their weak resilience, as well as making it very difficult for them to manage the risks posed by climate change. The study suggests that it is critical that interventions are planned in such a way that they can address multidimensional poverty in the region which in turn will increase the innate capacity of communities to adapt to climate risks.

In summary, the data of 51 articles that were systematically reviewed based on the ranking of the number of citations are presented in Table 3.

Table 3. Articles that meet the criteria

Rank	NoC	Tytel	Author/Year	Source
1	143	Geographic identification of multidimensional poverty in rural China under the framework of sustainable livelihoods analysis	Y. Liu/2016	Applied Geography
2	108	Spatial restructuring through poverty alleviation resettlement in rural China	K. Lo/2016	Journal of Rural Studies
3	71	Climate change and poverty: Building resilience of rural mountain communities in South Sikkim, Eastern Himalaya, India	A. Barua/2014	Regional Environmental Change
4	69	Ex post impacts of improved maize varieties on poverty in rural Ethiopia	D. Zeng/2015	Agricultural Economics (United Kingdom)

5	60	Estimating multidimensional poverty levels in rural Pakistan: A contribution to sustainable development policies	I.U.H. Padda/2018	Journal of Cleaner Production
6	60	Geographical identification and classification of multi-dimensional poverty in rural China	Y. Liu/2015	Dili Xuebao/Acta Geographica Sinica
7	58	Promotion of degraded land consolidation to rural poverty alleviation in the agro-pastoral transition zone of northern China	Y. Wang/2019	Land Use Policy
8	58	Cultural tourism and poverty alleviation in rural Kilimanjaro, Tanzania	W. Anderson/2015	Journal of Tourism and Cultural Change
9	58	Value chain development for rural poverty reduction: A reality check and a warning	D. Stoian/2012	Enterprise Development and Microfinance
10	56	Poverty alleviation through e-commerce: Village involvement and demonstration policies in rural China	C. PENG/2021	Journal of Integrative Agriculture
11	54	Poverty and Inequality in the Rural Brazilian Amazon: A Multidimensional Approach	G.R. Guedes/2012	Human Ecology
12	53	Rural residence and poverty are independent risk factors for chronic obstructive pulmonary disease in the United States	S. Raju/2019	American Journal of Respiratory and Critical Care Medicine
13	51	Digital financial inclusion and farmers' vulnerability to poverty: Evidence from rural China	X. Wang//2020	Sustainability (Switzerland)
14	50	The influence of poverty alleviation resettlement on rural household livelihood vulnerability in the western mountainous areas, China	W. Liu/2018	Sustainability (Switzerland)
15	50	Growth and chronic poverty: Evidence from rural communities in Ethiopia	S. Dercon/2012	Journal of Development Studies
16	48	Does urbanization reduce rural poverty? Evidence from Vietnam	M. Arouri/2017	Economic Modelling
17	46	Does farmer entrepreneurship alleviate rural poverty in China? Evidence from Guangxi Province	E. Naminse/2018	PLoS ONE
18	45	Multi-scalar energy transitions in rural households: Distributed photovoltaics as a circuit breaker to the energy poverty cycle in Indi	P. Yadav/2019	Energy Research and Social Science
19	44	Microfinance and Household Poverty Reduction: Empirical Evidence from Rural Pakistan	A.K. Ghalib/2015	Oxford Development Studies
20	44	Unraveling the Linkages Between Water, Sanitation, Hygiene, and Rural Poverty: The WASH Poverty Index	R. Giné Garriga/2013	Water Resources Management



21	41	Associations between soil lead concentrations and populations by race/ethnicity and income-to-poverty ratio in urban and rural areas	C. Aelion/2013	Environmental Geochemistry and Health
22	38	Impact of livelihood capital endowment on poverty alleviation of households under rural land consolidation	W. Wang/2021	Land Use Policy
23	38	Achieving "Total Sanitation" in Rural African Geographies: Poverty, Participation and Pit Latrines in Eastern Zambia	K. Bardosh/2015	Geoforum
24	36	What is the anti-poverty effect of solar PV poverty alleviation projects? Evidence from rural China	J. Liu/2021	Energy
25	35	Building a global schistosomiasis alliance: An opportunity to join forces to fight inequality and rural poverty	L. Savioli/2017	Infectious Diseases of Poverty
26	34	The prospects of decentralised solar energy home systems in rural communities: User experience, determinants, and impact of free solar power on the energy poverty cycle	P. Yadav/2019	Energy Strategy Reviews
27	34	Poverty, urban-rural classification and term infant mortality: A population-based multilevel analysis	Y.A. Mohamoud/2019	BMC Pregnancy and Childbirth
28	33	The problems, needs and strategies of rural teacher development at deep poverty areas in China: Rural schooling stakeholder perspectives	J. Li/2020	International Journal of Educational Research
29	32	Health, income and poverty: Evidence from China's rural household survey	Y. Zhou/2020	International Journal for Equity in Health
30	31	Financial development, poverty and rural-urban income inequality: evidence from South Asian countries	M. Sehrawat/2016	Quality and Quantity
31	31	Natural Resource Use, Incomes, and Poverty Along the Rural-Urban Continuum of Two Medium-Sized, South African Towns	C.D. Ward/2016	World Development
32	30	Soil fertility decline at the base of rural poverty in sub-Saharan Africa	B. Vanlauwe/2013	Nature Plants
33	29	Impacts of COVID-19 on agriculture and rural poverty in China	J.K. HUANG/2020	Journal of Integrative Agriculture
34	28	Rural Labor Migration and Poverty Reduction in China	P. Jia/2017	China and World Economy
35	28	Poverty and Livelihood Diversification in Rural Liberia: Exploring the Linkages between Artisanal Diamond Mining and Smallholder Rice Production	G. Hilson/2012	Journal of Development Studies

36	27	Poverty and income inequality in rural Agrarian household of southwestern Nigeria: The gender perspective	A. Ogundipe/2019	Open Agriculture Journal
37	26	Temperature shocks, short-term growth and poverty thresholds: Evidence from rural Tanzania	M. Letta/2018	World Development
38	26	The politics of defining and alleviating poverty: State strategies and their impacts in rural Kerala	G. Williams/2012	Geoforum
39	25	Exploring rural energy choice from the perspective of multi-dimensional capabilities: Evidence from photovoltaic anti-poverty areas in rural Chin	F. Huang/2021	Journal of Cleaner Production
40	25	Left in the dark? Oil and rural poverty	B. Smith/2018	Journal of the Association of Environmental and Resource Economists
41	25	Forest-poverty nexus: Exploring the contribution of forests to rural livelihoods in Kenya	J. Kabubo-Mariara/2013	Natural Resources Forum
42	25	Assets and Poverty Traps in Rural Bangladesh	A. Quisumbing/2013	Journal of Development Studies
43	24	Poverty, rural population distribution and climate change	E.B. Barbier/2018	Environment and Development Economics
44	24	Rural poverty and social exclusion in the United States and the United Kingdom	M. Shucksmith/2012	Rural Transformations and Rural Policies in the US and UK
45	22	How to get rural households out of energy poverty in Nigeria: A contingent valuation	E. Nduka/2021	Energy Policy
46	22	Agro-clusters and Rural Poverty: A Spatial Perspective for West Java	D. Wardhana/2017	Bulletin of Indonesian Economic Studies
47	21	Narrowing urban-rural income gap in China: The role of the targeted poverty alleviation program	J. Tang/2022	Economic Analysis and Policy
48	21	The importance of public health, poverty reduction programs, and women's empowerment in the reduction of child stunting in rural areas of Moramanga and Morondava, Madagascar	C. Rabaoarisoa/2017	PLS ONE
49	21	Pathways into and out of Poverty: A Study of Rural Household Wealth Dynamics in Kenya	M. Muyanga/2013	Journal of Development Studies
50	21	Pathways out of poverty in lagging regions: Evidence from rural western China	L. Christiaensen/2013	Agricultural Economics (United Kingdom)

51	20	Impact of Climate-Smart Agricultural Technology on Multidimensional Poverty in Rural Ethiopia	T.M. HABTEWOLD /2021	Journal of Integrative Agriculture
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### Relationship between words (Co-occurrence)

Based on the results of the bibliometric analysis, it involves the use of the VOSviewer software application to analyze the occurrence of keywords in scientific publications. Using this application, researchers can create a network map based on the data obtained from the analysis. The key word used by the researcher is rural poverty, the results of the research network map are presented in Figure 3.

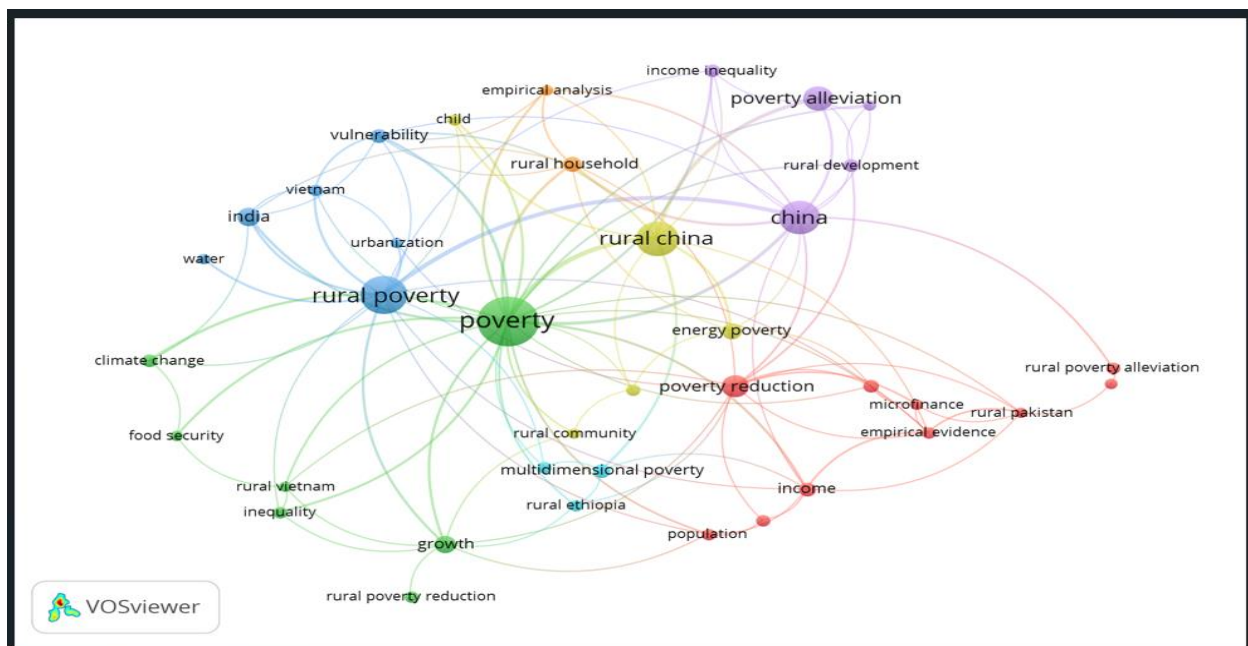


Figure 3. Network Visualization

Figure 3 shows that there are five clusters of articles that review poverty in rural areas. The first focus is red, discussing rural poverty in this cluster is poverty reduction, microfinance, empirical evidence, rural Pakistan, income, population, and rural poverty alleviation. The second cluster is green, discussing rural poverty in this cluster is growth, rural poverty reduction, inequality, food security and climate change. The third cluster is blue, discussing multidimensional poverty, growth, water, urbanization, and vulnerability. The fourth cluster is yellow, discussing energy poverty, rural communities, children and rural households. The fifth cluster is purple, discussing income inequality, poverty alleviation and rural development.

## CONCLUSION

The results of the data analysis show that the development of articles that review rural poverty for a decade (2012-2022) fluctuates. The highest number of articles reviewing poverty in rural areas was found in 2021 as many as 7 articles or 13.73 percent. The development of the number of article citations shows

that the highest number of citations is the 2015 article as many as 299 citations or 14.18 percent. The highest average citation is a 2016 article with an average citation value of 94. The top three articles reviewed from the number of citations with the number of citations each are articles with the title Geographic identification of multidimensional poverty in rural China under the framework of sustainable livelihoods analysis, Spatial restructuring through poverty alleviation resettlement in rural China, and Climate change and poverty: Building resilience of rural mountain communities in South Sikkim, Eastern Himalaya, India. The findings of the research state that the causes of poverty in rural areas are poor natural conditions, loss of agricultural land and extreme climate change. These findings mean that poverty in rural areas of China and in mountainous regions of India occurs in farming communities, where their lives are still heavily influenced by natural conditions.

The results of Vosviewer's analysis, reviewed from the relationship between words (Co-occurrence) show that there are five clusters of articles that review rural poverty. Concepts related to the five clusters include microfinance, food security, climate change, water, vulnerability, energy poverty, rural household, income inequality. The three words that are interrelated between clusters one to cluster five are rural China, rural households and energy poverty. This means that in the 2021-2022 research period, the researcher focused on research in the Chinese region and the poverty studied was the poverty of housewives and the form of poverty was its limitation on energy.

empirical and theoretical benefits, the economic benefits, and the existence of any new findings.

## IMPLICATION/LIMITATION AND SUGGESTIONS

The findings of this research provide implications for determining poverty alleviation policies in rural areas. The limitations of research that do not focus on one region or country provide an opportunity for the next researcher to review rural poverty, focusing on one country. Another limitation is that the keywords used are general, namely rural poverty, the next research can specialize keywords for example government programs to alleviate poverty in rural areas.

## REFERENCES

- Adji, A., Hidayat, T., Tuhiman, H., Kurniawan, S., & Maulana, A. (2020). *Measurement of Poverty Line in Indonesia: Theoretical Review and Proposed Improvements*. January, 48-e. [http://tnp2k.go.id/download/88787WP\\_48\\_Measurement of Poverty Line in Indonesia-Theoretical Review and Proposed Improvements.pdf](http://tnp2k.go.id/download/88787WP_48_Measurement%20of%20Poverty%20Line%20in%20Indonesia-Theoretical%20Review%20and%20Proposed%20Improvements.pdf)
- Aggarwal, S. (2018). Do rural roads create pathways out of poverty? Evidence from India. *Journal of Development Economics*, 133, 375–395. <https://doi.org/10.1016/j.jdevco.2018.01.004>
- Banerjee, S. (2017). Microfinance and the business of poverty reduction: Critical perspectives from rural Bangladesh. *Human Relations*, 70(1), 63–91. <https://doi.org/10.1177/0018726716640865>
- Barua, A. (2014). Climate change and poverty: Building resilience of rural mountain communities in South Sikkim, Eastern Himalaya, India. *Regional Environmental Change*, 14(1), 267–280. <https://doi.org/10.1007/s10113-013-0471-1>
- BPS. (2022). *Penghitungan dan Analisis Kemiskinan Makro Indonesia Tahun 2021*.
- Brier, J., & lia dwi jayanti. (2020). *Poverty and equality* (Vol. 21, Issue 1). <http://journal.um-surabaya.ac.id/index.php/JKM/article/view/2203>

- Cali, M., & Menon, C. (2013). Does urbanization affect rural poverty? Evidence from indian districts. *World Bank Economic Review*, 27(2), 171–201. <https://doi.org/10.1093/wber/lhs019>
- Donthu, N., Kumar, S., Mukherjee, D., Pandey, N., & Lim, W. M. (2021). How to conduct a bibliometric analysis: An overview and guidelines. *Journal of Business Research*, 133(March), 285–296. <https://doi.org/10.1016/j.jbusres.2021.04.070>
- Farida, N. (2020). Analisis bibliometrik berdasarkan pendekatan Co-word : Kecenderungan penelitian bidang kearsipan pada Jurnal Khazanah dan Journal of Archive and Record tahun 2016 – 2019. *Khazanah: Jurnal Pengembangan Kearsipan*, 13(2), 91. <https://doi.org/10.22146/khazanah.55690>
- Griggs, D., M, S.-S., O, G., J, R., C, Ö. M., P, S., W, S., G, G., N, K., & N, N. (2013). Sustainable developmnet goals for people and planet. *Nature*, 495(7441), 305–307.
- Hansen, J., Hellin, J., Rosenstock, T., Fisher, E., Cairns, J., & ... (2019). Climate risk management and rural poverty reduction. In *Agricultural* .... Elsevier. <https://www.sciencedirect.com/science/article/pii/S0308521X17307230>
- Liu, Y. (2016). A geographic identification of multidimensional poverty in rural China under the framework of sustainable livelihoods analysis. *Applied Geography*, 73, 62–76. <https://doi.org/10.1016/j.apgeog.2016.06.004>
- Liu, Y. (2020). The role of agriculture and foreign remittances in mitigating rural poverty: Empirical evidence from Pakistan. *Risk Management and Healthcare Policy*, 13, 13–26. <https://doi.org/10.2147/RMHP.S235580>
- Liu, Y., & Xu, Y. (2016). A geographic identification of multidimensional poverty in rural China under the framework of sustainable livelihoods analysis. *Applied Geography*, 73, 62–76. <https://doi.org/10.1016/j.apgeog.2016.06.004>
- Lo, K. (2016). Spatial restructuring through poverty alleviation resettlement in rural China. *Journal of Rural Studies*, 47, 496–505. <https://doi.org/10.1016/j.jrurstud.2016.06.006>
- Misra, G., Kumar, V., Agarwal, A., & Agarwal, K. (2016). Internet of Things (IoT) – A Technological Analysis and Survey on Vision, Concepts, Challenges, Innovation Directions, Technologies, and Applications (*An Upcoming or Future Generation Computer Communication System Technology*). *American Journal of Electrical and Electronic Engineering*, Vol. 4, 2016, Pages 23-32, 4(1), 23–32. <https://doi.org/10.12691/ajeee-4-1-4>
- Naseer, M. N., Zaidi, A. A., Khan, H., Kumar, S., Owais, M. T. Bin, Wahab, Y. A., Dutta, K., Jaafar, J., Uzair, M., Johan, M. R., & Badruddin, I. A. (2022). Desalination technology for energy-efficient and low-cost water production: A bibliometric analysis. *Green Processing and Synthesis*, 11(1), 306–315. <https://doi.org/10.1515/gps-2022-0027>
- Pasin, O., & Pasin, T. (2022). Bibliometric Analysis of COVID-19 and the Association with the Number of Total Cases. *Disaster Medicine and Public Health Preparedness*, 16(5), 1947–1952. <https://doi.org/10.1017/dmp.2021.177>
- Poverty and its measurement.* (n.d.).
- Qin, H., Prasetyo, Y., Bass, M., Sanders, C., Prentice, E., & Nguyen, Q. (2020). Seeing the Forest for the Trees: A Bibliometric Analysis of Environmental and Resource Sociology. *Society and Natural Resources*, 33(9), 1131–1148. <https://doi.org/10.1080/08941920.2019.1620900>
- Rejeb, A., Simske, S., Rejeb, K., Treiblmaier, H., & Zailani, S. (2020). Internet of Things research in supply chain management and logistics: A bibliometric analysis. *Internet of Things (Netherlands)*, 12.

<https://doi.org/10.1016/j.iot.2020.100318>

- Shen, J., Shen, H., Ke, L., Chen, J., Dang, X., Liu, B., & Hua, Y. (2022). Knowledge Mapping of Immunotherapy for Hepatocellular Carcinoma: A Bibliometric Study. *Frontiers in Immunology*, 13(January), 1–12. <https://doi.org/10.3389/fimmu.2022.815575>
- Singh, B. (2021). A bibliometric analysis of behavioral finance and behavioral accounting. *American Business Review*, 24(2), 198–230. <https://doi.org/10.37625/ABR.24.2.198-230>
- Strandberg, C., Nath, A., Hemmatdar, H., & Jahwash, M. (2018). Tourism research in the new millennium: A bibliometric review of literature in Tourism and Hospitality Research. *Tourism and Hospitality Research*, 18(3), 269–285. <https://doi.org/10.1177/1467358416642010>
- Tang, M., Liao, H., & Su, S. F. (2018). A Bibliometric Overview and Visualization of the International Journal of Fuzzy Systems Between 2007 and 2017. *International Journal of Fuzzy Systems*, 20(5), 1403–1422. <https://doi.org/10.1007/s40815-018-0484-5>
- Weeks, E. (2018). Medicalization of rural poverty: Challenges for access. *Journal of Law, Medicine and Ethics*, 46(3), 651–657. <https://doi.org/10.1177/1073110518804219>
- Widowati, A., & Tyas, R. A. (2024). Mobile-based learning in science trends: a systematic review (2015–2023). *Cogent Education*, 11(1). <https://doi.org/10.1080/2331186X.2024.2303563>
- Xiao, Y., & Watson, M. (2019). Guidance on Conducting a Systematic Literature Review. *Journal of Planning Education and Research*, 39(1), 93–112. <https://doi.org/10.1177/0739456X17723971>