

Investigating the Barriers to Successful Rural Development Projects: Bibliometric Analysis of Trends and Insights from South Africa (2014-2024)

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1 ABSTRACT

Rural development projects are crucial for improving the livelihoods of rural populations and enhancing overall economic growth, serving as a potential solution to socio-economic challenges in these areas. Previous studies suggest that targeted investments and policies can address rural issues effectively. However, many rural development initiatives, particularly in developing countries like South Africa, often fail to achieve their intended outcomes. This paper conducts a bibliometric review to identify and analyze the key factors hindering the success of rural development projects. This paper conducts a bibliometric review to identify and analyze the key factors hindering the success of rural development projects. A comprehensive bibliometric analysis was conducted using the Web of Science database. The search strategy focused on keywords such as “rural development” “project failure”, “success factors” and “barriers”. The exported data was then analysed using Vos Viewer software to illustrate the main keywords around the study area through network maps. Articles published between 2014 and 2024 were included to capture recent trends and insights. The analysis involved identifying publication counts, citation analysis, and keyword frequency in the literature. The findings highlight the need for a multi-faceted approach in project planning and implementation to overcome these barriers and enhance the efficacy of rural development initiatives.

Keywords: rural development, project failures, success factors, barriers, planning

2 INTRODUCTION

Income sources in the rural areas of the former Bantustans of South Africa have always been a subject of study. There is poverty in most parts of the country, proving the effects of colonialism and apartheid regimes and the lack of adequate measures by the new democratic state to eradicate it (Khumalo, 2013). Rural areas in South Africa are characterised by a lack of social and economic infrastructure and poor maintenance of existing infrastructure (Sigwela et al., 2017). Some of the effects widely associated with them include poor standards of roads, houses made of mud, land decline and efficient uses of the same. Yet, a few rural development projects have been initiated and they touched upon the economic and social development needs of rural communities and are crucial for bridging the gap between urban and rural regions (Everatt and Ebrahim, 2020). Evaluating both the poverty and vulnerability research area, it can be noted that both a very long history of research and a vast number of development interventions have not helped the problem sufficiently (Eriksen et al., 2021). All these lead to the loss of resources and negative impacts on the societies that such agency seeks to benefit. The main reasons for this failure in development in rural areas are inadequate consultation with the community, poor needs analysis, economic considerations, and problems associated with governance and institutions.

The government to reduce the challenges that faced social and economic infrastructure in rural regions begun formulation of the rural development projects such as Comprehensive Rural Development (CRDP) of which was piloted in Muyexe village in 2009 (Bila, 2013). Greater Giyani Municipality IDP (2022/23) on the economic development of Greater Giyani Local Municipality notes that this village was a raw village with very little basic infrastructures, such as water and housing; electricity; economic infrastructure such as schools and recreational centres. Based on the provision of infrastructure, it was expected that the projects would result in employment, hence better livelihoods as well as poverty reduction in the community. However, the expectations were not met due to another fact that it did not manage to fulfil all of its goals. Therefore, this study analyses Web of Science to identify the publication trends and further employs Vos Viewer software to analyse the keyword relationships and dominant research themes.

3 RESEARCH QUESTIONS

How has the number of publications and citations in a specific field changed over the past decade?

What are the key themes and topics in the literature, and how have they evolved over time?

4 LITERATURE REVIEW

This section will discuss the literature related to the study, unpacking the origin of rural development, the implemented rural development projects in South Africa and the common challenges leading to the failure of rural development projects.

4.1 The Origin of Rural Development in South Africa

It is postulated that three historical factors underpinned rural development in South Africa, mainly arising from colonial land deracialisation, therefore resulting in apartheid policies for separate development in areas that were rural (Hebinck and Shackleton, 2011). After the displacement of indigenous people, there was much capital directed towards the expansion and development of the white controlled commercial farmer community. Stock farming and control of food production in the African reserves led to overcrowding because of natural growth of the population and also because people were removed from the so-called 'white areas' to live in Bantustans (Nongogo, 2016). The Mission Stations Act of 1909, the Coloured Rural Areas Act (Act 9 of 1987), and the Coloured Persons 'Betterment Scheme 'as outlined in the 1963 Act all affected areas deeded as 'coloured rural areas' in the Western Cape.

These origins are connected and are based on historical systemic processes of discrimination. Unfortunately, it was not until the promulgation of a three-tier government structure in 1994 that municipalities were able to enter into discussions about what a national rural development strategy might entail. This strategy therefore has to inconveniently address poverty and unequal development inherited from previous historical periods and seek to reduce on-going social and economic ramifications of such disparities (Phuhlisani Solutions, 2009).

4.2 Strategies For Rural Development in South Africa Since 1994

For the last two decades, the South African government has sought to do so through different strategies in its Rural Development Framework aimed at eradicating rural poverty and redressing socio-economic inequality that apartheid regime fostered (Kativhu and Netshandama, 2024). Among these is the Reconstruction and Development Programme (RDP) that was initiated in 1994, and it sought to bring socio-economic renewal and empower that coupled with good planning, agriculture diversification and availability and utilization of social necessities. These ambitious goals were self-defeating because the RDP had been criticized for focusing on the production of deliverables, while not doing enough to improve the lives of the rural poor who continue to experience high unemployment and earning inequality (Moselane, 2015). The Growth, Employment and Redistribution (GEAR), an economic plan that was put in place in 1996 to propel the economy forward and create employment impedes poverty and unequal distribution of wealth inadequately (Ndhambi, 2015). The Rural Development Framework (1997) builds on RDP objectives, and the Integrated Sustainable Rural Development Strategy (ISRDS) (2000) aimed at integrated service delivery but failed due to inadequate implementation and finance (Ndhambi, 2015). Accelerated and Shared Growth Initiative of South Africa (ASGISA) launched in 2006 was designed to address emergent socio-economic issues but again implementation was not sustained. The last is the CRDP – Comprehensive Rural Development Programme launched in 2009 where policy makers focus on participation of the communities and infrastructure development to tackle rural poverty and food insecurity (Bila, 2013). In general, these strategies indicate a persistence of dealing with apartheid's aftermath; however, many of them have been implemented with difficulties and have varying success.

4.3 Common Factors Leading to Failure

It can be learnt that most rural development projects are critically developed top-down and implemented imperfectly without enough consultation and involvement of intended beneficiaries (Joshi and Rao, 2018). Another adverse effect of this low participation in the process is resistance or lack of support for the initiatives, which leads to inferior results. A needs assessment approach is crucial to discover the specific difficulties and opportunities typical for rural areas (Kapur, 2019). Situations where objectives and goals are not analysed in detail may mean ignoring some essential problems while the proposed solutions may also be quite irrelevant or ineffective. As a result, the resources can become misplaced, and this will mean that such

initiatives will not be effective either. Also, the approaches toward sustainable growth in the context of the rural development of the country often seem to be hardly economically viable in many cases (Purvis and Robinson, 2019). Projects that have not factored in the local economic climate and possibly the new business opportunities may find it extremely difficult to sustain themselves after some time (Van der Ploeg et al., 2017). Hence, it is necessary for the projects to be planned with an adequate knowledge of markets and resources and available economic conditions to become sustainable after getting funding.

Additionally, there are challenges such as political instability, corruption and general unwillingness and/or inability to develop appropriate and sufficient institutions to support project implementation (Živojinović et al., 2019). Proper administration is very important for the available scarce resources to have accountability and to increase the trust of the community. Where institutions are feeble, rural development projects may not achieve their intended goals because the projects are conducted in a ineffective and unrestrained environment. Likewise, the rural development concept also requires flexibility; projects that were set for implementation but not willing to change directions or improvise where there are changes in community dynamics, physical environment or economic situation can fail to succeed (Kypengren, 2017). For a long-term goal, there must be a great deal of flexibility with the possibility to evaluate the process and adjust if necessary.

4.4 Strategies for Effective Town Planning in Rural Development

Different strategic urban planning methods must be employed because they will help overcome the challenges in rural development initiatives. Rural development becomes effective when authorities organize land planning while taking into account area resources along with landholding systems and environmental variables. Sustainable development land use policies can make land utilization more efficient by limiting land disputes according to Everatt and Ebrahim (2020). Rural economic development hinges on investments in key infrastructure – roads, water, and energy. Planning that meets community requirements as well as guarantees economic longevity must form the basis for achieving long-term community benefits (Bila, 2013).

Getting communities involved is essential to achieve successful projects and make them feel like owners. The involvement of local stakeholders in decision-making under participatory governance platforms helps create projects that match actual population needs which leads to sustainable outcomes (Kapur, 2019). The plans need to shift their direction according to both changes within the community and adjustments in wider environmental influences. Examples of adaptable projects which adjust their operations based on updated information or changed community needs perform better in attaining their extended objectives (Kypengren, 2017). The development of effective town planning and management requires local institutions to receive essential capacity-building to function properly. Through training programs for local leaders in governance and resource management communities gain the ability to steer their own development paths and build trust internally (Purvis and Robinson, 2019).

5 METHODOLOGY

In undertaking this research, the bibliometric analysis approach was used. This methodology has been found to be quantitative as a means of examining large data sets. This enables one to measure productivity and impact of scientific outputs of any researcher, an institution, or a country. It has been useful across disciplines in a field to get a snapshot of the field and watch for details and evolution (Donthu et al., 2021). The authors employ this approach to investigate the knowledge landscape and to visually represent and analyze the field of ‘rural development’ in the developed, transition and developing countries. The term “rural development” was exported using Web of Science with data dating from between 2014 and 2024. The search strategy focused on keywords such as "rural development," "project failure," "success factors," and "barriers. The exported data was then analysed using Vos Viewer software to illustrate the main keywords around the study area through network maps. Articles published between 2014 and 2024 were included to capture recent trends and insights. The analysis involved identifying publication counts, citation analysis, and keyword frequency in the literature. The overall purpose of this study is to assess research failures of rural development projects in developed, transitional, and developing countries.

Therefore, the study has been designed to unpack the publication trends, research themes and topics and the co-authorship patterns of the field by using the following research questions: How has the number of publications and citations in a specific field changed over the past decade?

6 RESULTS, ANALYSIS AND DISCUSSION

This section will discuss the results and analysis.

6.1 Publication Trends:

Knowing publication trends is thus useful for identifying areas of growth or contraction and as such, potential areas of growth or demise. The trends can reveal which topics are getting raised, which might be related to their growing popularity among scholars, where they are cited. For this study, the researchers used bibliometric data over 10 years between 2014 and 2024. According to Figure 1 below, in the year 2014, the publications relating to the study of rural development were fewer, with 33 publications and 24 citations, as compared to the year 2015, which had around 46 publications with 165 citations. However, the subject gained popularity during the year 2016. The publications increased from 46 to 53 within the years. This shows that there was interest in the topic. There is growing awareness of the assignment of rural development areas towards coping with challenges such as poverty, hunger and sustainable development. This increased attention may cause more research to be performed, and although the increase in published articles points to an increased concern with the problematics of rural development, it also means that more solutions can be developed. Thus, more change can be brought to the field. During the years 2019 and 2020, the publications decreased, from 50 to 43. Given the situation created by COVID-19 disruptions in early 2020, the onset of the pandemic disrupted many research activities, funding sources, and collaboration opportunities. Many researchers shifted their focus to health-related topics or faced delays in fieldwork, leading to a decrease in rural development publications. However, during the year 2021, there was a slight increase in publications, which increased from 43 to 44. As the situation stabilized in 2021, there may have been a renewed focus on rural development, especially as the pandemic highlighted vulnerabilities in rural areas. This could have led to increased publications as researchers sought to address the challenges rural communities face. From 2021 to 2024 there was a deep decrease in publications, from 44 to 1. Researchers may have moved towards more pressing issues, such as urbanization, climate change, or economic recovery, especially in the aftermath of the pandemic.



Figure 1: Publication Trends

6.2 Research themes and topics

The second set of data analysed for this study consisted of a keyword frequency analysis. Drawing from the upward trend in research publications from the first data set, it is critical to analyse which research areas are

in high demand within the keyword variables, answering the first research question. When the data was imported to VOS Viewer from the Web of Science database, a minimum of 5 term occurrences were selected. Of the 1766 terms, 50 met the threshold. 29 items were created, which were grouped into 5 clusters and contained 78 links with a total link strength of 101. To investigate the pertinent topics in this field further, a network map was created in VOS Viewer with a temporal overlay (2014-2024) to understand the research trend.

Analysing the research themes highlights that studies focus on real-world problems and health-related consequences of unsuccessful rural development projects, especially in South Africa. The study focuses on rural South Africa for specific reasons to analyse the particular barriers that stand in the way of development in that region therefore supporting the examples with local projects such as Muyexe village. Research interest in actual obstacles during project execution stands out through the links between "implementation" and "impact" as well as "barriers", thus reflecting the reason why projects might fail. The combination of health keywords "obesity" and "mortality" demonstrates studies analysing the harmful effects which implementation failures have on the wellness of rural populations beyond monetary impacts and into the facets of physical health.

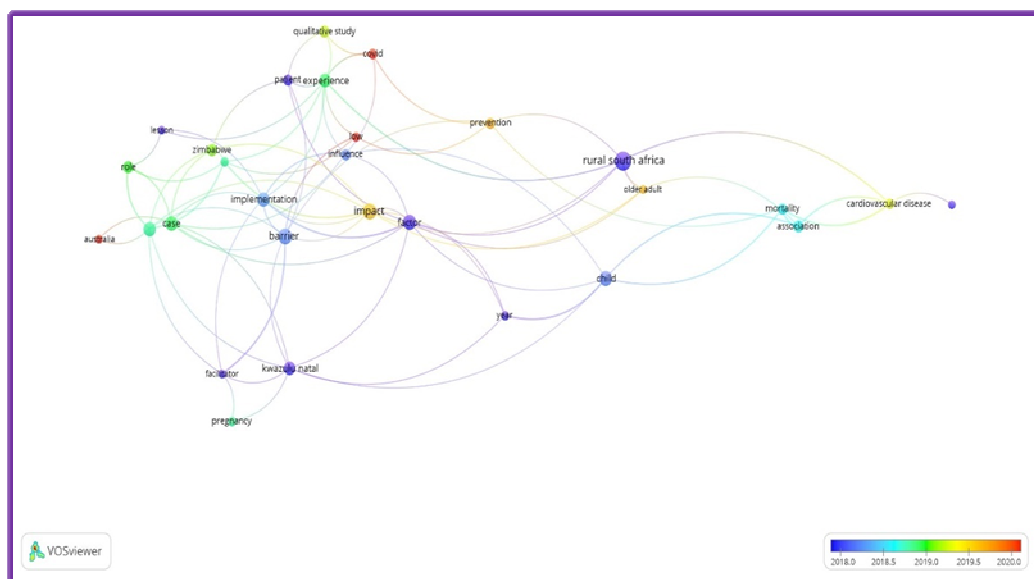


Figure 2: Research themes and topics

6.3 Co-authorship Analysis

To map the research field further, the authors opted to conduct an author co-citation analysis to identify the prominent authors in the field. The selected maximum number of authors per document was 25. The selected minimum number of documents of an author was 2, and of 2303 authors, 183 met the threshold.

The authors further used VOSviewer to create a co-authorship network map (see Figure 3) that displays intellectual research structures relevant to rural road infrastructure, which matches the development emphasis of the study. The figure presents authors working together on research. Research about infrastructure access associated with socioeconomic effects targeting healthcare and education services serves as the main focus of "Kahn, Kathleen" research group in accordance with the essential service access emphasis of the study. The research group that centres on "Tansen, Frank" studies public transportation together with connectivity, which directly responds to concerns about rural population compactness. The cluster regarding "Vandermotten, Alain" advances research into economic effects resulting from infrastructure investment, which directly connects to the development analysis of the study. Figure 3 shows interconnected clusters, which reflect the paper's recommendation for integrated solutions because they implement connecting lines to represent cooperation among experts examining the multiple issues of rural road infrastructure.

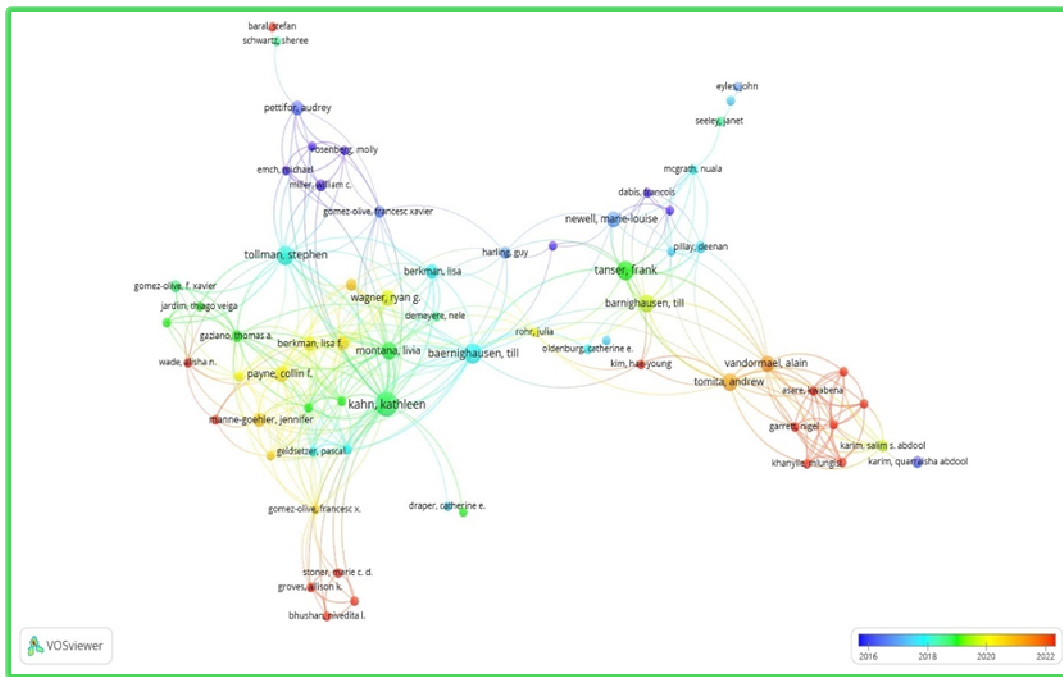


Figure 3: Co-authorship Analysis

From Table 2, shown below, Khan Kathleen has the highest total link strength; therefore, it is the most influential in this study area. This means several other published works are closely related to the work of Khan Kathleen, are often cited, or the author is included in many other related studies. Montana Livia has well-established ties to the research network and has significant link strength, with many more links than documents. This implies that contributions made by Montana Livia are well-absorbed in the field and probably involved in the discussion on the research keywords that are under analysis. Tollman Stephen also demonstrates relatively high connectivity and, therefore, bears a somewhat lower connectivity level than Montana Livia. Baernihausen Till has moderate betweenness centrality, which means the work is somewhat related to other studies but not as close and tied as the authors mentioned above. Like Baernihausen Till, Tomita Andrew has moderate connectivity. Payne Collin F has the least total link strength of all these authors. This indicates that although Payne Collin is present in the literature to some extent, his work can be less referred to and linked to other influential studies as compared to others.

#No	Author	Documents	Total link strength
1	Kahn Kathleen	12	65
2	Montana Livia	6	42
3	Tollman Stephen	7	38
4	Baernihausen Till	8	31
5	Tomita Andrew	6	31
6	Payne Collin F	5	30

Table 1: Co-authorship analysis with the total link strength

7 CONCLUSION

The paper presents a comprehensive bibliometric analysis of rural development projects, focusing on their failures and the factors contributing to success. Understanding publication trends is essential for identifying areas of growth or decline in research, particularly in rural development. To analyse the level of interest by year for this study, the bibliometric data used covered a period of ten years from the year 2014 to 2024; the observation indicated that interest in rural development was rather cyclic. In the first period (2014), a total of 33 publications were reported, while in the second period (2015), this number rose to 46, with a rise in citation rates as well. The number of publications reached its highest point in 2016 while interest elevated during 2019 and 2020; however, it hit a decline in the following year because the COVID-19 pandemic shifted the focus to health-related research only. Interest in rural issues rose slightly in 2021 to five articles before dropping to only one in 2024, as scholars focused on topics such as urbanization and climate change. Third, it was also found that frequency analysis of keywords resulted in a more focused study of rural development with other emerging themes. Co-authorship analysis was used to determine the leading

influential authors in the field; the most influential author was found to be Kahn Kathleen, who emphasises collaboration and knowledge networks in promoting the advancement of rural development science.

In conclusion, addressing the barriers to successful rural development initiatives requires a multifaceted approach that encompasses effective town planning strategies. The importance of integrated land use planning, sustainable infrastructure development, participatory governance, flexibility in project implementation, and local capacity building cannot be understated. These factors are critical for enhancing project efficacy and ensuring that rural development interventions are relevant, sustainable, and beneficial to the communities they aim to serve.

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