

International Journal of Science and Research Archive

eISSN: 2582-8185 Cross Ref DOI: 10.30574/ijsra Journal homepage: https://ijsra.net/



(REVIEW ARTICLE)

Check for updates

Community development programs in Rural Africa: An effectiveness review

Beatrice Adedayo Okunade ¹, Bukola A, Odulaja ², Foluke Eyitayo Adediran ³, Ololade Elizabeth Adewusi ⁴, Rosita Ebere Daraojimba ^{5,*} and Justice Chika Igbokwe ⁶

¹ Independent Researcher, Illinois, USA.

² Independent Researcher, Nigeria.

³ Independent Researcher, SAMFAD Initiative, Johannesburg, South Africa.

⁴ Independent Researcher, UK.

⁵ Department of Business Administration, Ahmadu Bello University, Zaria, Nigeria.

⁶ Independent Researcher, Medford, Massachusetts, USA.

International Journal of Science and Research Archive, 2024, 11(01), 1217-1226

Publication history: Received on 23 December 2023; revised on 01 February 2024; accepted on 03 February 2024

Article DOI: https://doi.org/10.30574/ijsra.2024.11.1.0185

Abstract

Community Development Programs (CDPs) play a pivotal role in fostering positive change and sustainable development in rural Africa. This paper provides a comprehensive review of the effectiveness of such programs, shedding light on their impact, challenges, and potential avenues for improvement. In recent decades, numerous CDPs have been implemented across rural Africa, aiming to address a myriad of socio-economic challenges faced by local communities. These programs typically encompass a range of initiatives, including infrastructure development, healthcare services, education, and livelihood improvement. The overarching goal is to empower communities, enhance their resilience, and foster long-term growth. The effectiveness of CDPs in rural Africa is a multifaceted subject, influenced by various factors. One key aspect is the context-specific nature of each community, necessitating tailored approaches that consider local cultures, traditions, and needs. Successful programs often demonstrate a deep understanding of these contextual nuances, fostering community engagement and ownership. While some CDPs have shown remarkable success in achieving their intended outcomes, challenges persist. Limited financial resources, inadequate infrastructure, and political instability can hinder the implementation of these programs. Additionally, the top-down approach adopted by some initiatives may result in a lack of community participation and, consequently, suboptimal outcomes. It is imperative to adopt a participatory and inclusive approach that involves local stakeholders in the decision-making process, ensuring sustainability and long-term impact. This review also highlights the importance of monitoring and evaluation mechanisms in assessing the effectiveness of CDPs. Rigorous data collection and analysis are essential for understanding the real impact of these programs on key indicators such as poverty reduction, healthcare access, and educational attainment. In conclusion, while Community Development Programs have made significant strides in rural Africa, there is room for improvement. Tailoring interventions to the specific needs of each community, fostering community participation, and implementing robust monitoring and evaluation processes are crucial steps toward enhancing the effectiveness of these programs. The findings of this review contribute to the ongoing discourse on community development in rural Africa, providing insights for policymakers, practitioners, and researchers alike.

Keyword: Community Development; Rural; Africa; Developmental Programs; Review

1. Introduction

Community Development Programs (CDPs) play a crucial role in rural Africa, where the context is often characterized by challenges such as drought, limited access to energy, and vulnerability to climate change (Ofoegbu et al., 2017). Smallholder farmers in South Africa, for example, have implemented various responses to drought, including changes

Copyright © 2024 Author(s) retain the copyright of this article. This article is published under the terms of the Creative Commons Attribution Liscense 4.0.

^{*} Corresponding author: Rosita Ebere Daraojimba

in local practices, structural measures, and technical interventions (Ruwanza et al., 2022). Additionally, the transition to renewable energy and the adoption of solar technologies are essential for sustainable development in rural Africa (Fouche & Brent, 2019). Participatory communication has been identified as a key factor in supporting the transition to renewables and the adoption of solar technologies in rural Africa (Nyoh, 2021). Furthermore, rural communities in Africa are vulnerable to the impacts of climate change, and there is a need to focus on improving their socioeconomic conditions and overall sustainable development (Ofoegbu et al., 2017).

The purpose of this review is to assess the effectiveness of CDPs in addressing the challenges faced by rural African communities and to identify potential improvements. By synthesizing the existing research on drought responses, renewable energy, and vulnerability to climate change in rural Africa, this review aims to provide insights into the effectiveness of CDPs in addressing these issues. Additionally, the review will explore the role of participatory communication in supporting the transition to renewables and the adoption of solar technologies in rural Africa. It will also highlight the importance of improving the socioeconomic conditions of rural communities and promoting overall sustainable development as part of CDPs.

In conclusion, the review will contribute to the understanding of the importance of CDPs in rural Africa and provide valuable insights into their effectiveness in addressing the challenges related to drought, energy access, and vulnerability to climate change. By identifying potential improvements, the review aims to inform the development and implementation of more impactful CDPs tailored to the specific needs of rural African communities.

2. Literature Review of Community Development Programs in Rural Africa

Community Development Programs (CDPs) in rural Africa encompass various initiatives aimed at fostering sustainable development. These programs include infrastructure development, healthcare provision, education enhancement, and livelihood improvement (Tirivanhu, 2023). The common goals and objectives of these programs are to build community resilience to climate change, promote sustainable development, and enhance access to essential services such as healthcare and education (Fouche & Brent, 2019; Ned et al., 2020; Ofoegbu et al., 2017; Couper et al., 2018; Geldsetzer et al., 2018; Mwadzingeni et al., 2020; Ndlovu et al., 2021; Nyoh, 2021; Roux et al., 2019).

Success stories and case studies of effective CDPs in rural Africa have been documented. For instance, a case study highlighted an effective and sustainable antiretroviral therapy program in rural South Africa, which achieved high viral load testing and suppression rates despite limited resources (Roux et al., 2019). Additionally, participatory communication was found to support the transition to renewables and the adoption of solar technologies in rural Africa, indicating successful community engagement in sustainable energy initiatives (Nyoh, 2021).

Factors contributing to the success of CDPs in rural Africa include localized institutional actors, which have positively impacted smallholder irrigation scheme performance in South Africa (Mwadzingeni et al., 2020). Furthermore, effective training programs for community-based rehabilitation workers have strengthened accessible rural rehabilitation practice, contributing to the success of healthcare initiatives (Ned et al., 2020).

Challenges faced by CDPs in rural Africa include vulnerability to climate change, limited financial resources, and the need for critical agrarian reforms (Tirivanhu, 2023; Ofoegbu et al., 2017; Mwadzingeni et al., 2020; Ndlovu et al., 2021). Additionally, addressing the training and curriculum needs of mid-level health workers has been identified as a challenge in ensuring effective healthcare provision in rural areas (Couper et al., 2018).

In conclusion, CDPs in rural Africa encompass a wide range of initiatives aimed at promoting sustainable development. While success stories demonstrate the effectiveness of certain programs, challenges such as vulnerability to climate change and limited resources need to be addressed to ensure the overall effectiveness of these programs.

3. Effectiveness of Community Development Programs

Community development programs have been shown to have a significant impact on poverty reduction and the improvement of livelihoods. These programs aim to accelerate poverty alleviation by fostering community independence through capacity building, participation, and institutional development (Triyowati et al., 2019). For instance, studies have demonstrated that community-based interventions, such as group-based parent support within cash transfer programs, have led to improved child development outcomes, indicating the effectiveness of such programs in enhancing livelihoods (Fernald et al., 2017). Additionally, community leadership development programs

have been found to provide participants with personal growth, efficacy, community commitment, and social cohesion, contributing to overall livelihood improvement (Cleveland & Cleveland, 2018).

Furthermore, the involvement of tribal youth in agricultural livelihood activities has been identified as a crucial factor in enhancing their livelihoods, emphasizing the importance of income generation activities within community development programs (Singh et al., 2022). Similarly, the spatial differentiation of income in natural tourism communities has been linked to livelihood assets, highlighting the significance of income-generating activities in these communities (Ma et al., 2018). Moreover, the impact of community development programs on financial performance and firm risk has been studied, revealing a significant negative effect on firm risk, indicating the potential economic benefits of such programs ("The Effect of Partnership and Community Development Program on Financial Performance and Firm Risk: Evidence from Indonesian State-Owned Enterprises", 2019).

In the context of poverty reduction, foreign direct investment (FDI) has been found to have a positive and significant impact on poverty reduction, emphasizing the potential of economic interventions in community development programs (Madueke et al., 2022). Additionally, the classification of livelihood strategies in rural areas has been recognized as essential for revealing different livelihood patterns and designing targeted poverty-reducing interventions, further underlining the importance of income generation in poverty reduction efforts (Sun et al., 2019).

Moreover, the effects of rural income projects on silk exports and the livelihood of smallholder producers have demonstrated the positive impact of income-generating activities on livelihood improvement, highlighting the potential of such initiatives in community development (Ogunlusi & Olaniyan, 2021). Additionally, community education programs within community development have been identified as crucial for improving community welfare, emphasizing the role of education in enhancing livelihoods and overall community development (Saepudin & Mulyono, 2019).

In conclusion, community development programs have shown effectiveness in poverty reduction and livelihood improvement through various interventions, including income generation activities, leadership development, and education programs. These findings underscore the importance of comprehensive community development approaches that address economic, social, and educational aspects to achieve sustainable poverty reduction and livelihood improvement.

3.1. Effectiveness of Community Development Programs on Healthcare access and outcomes

Community development programs play a crucial role in improving healthcare access and outcomes, particularly in rural communities where health equity is limited by socioeconomic and geographical factors (Gizaw et al., 2022). These programs are effective when they address health disparities and ensure equitable access to health resources, thereby improving the availability of healthcare services in underserved areas. Additionally, the success of these programs is closely linked to community engagement and cultural relevance in program development (Lane & Vatanparast, 2022). Principles of community engagement and self-determination are essential for ensuring feasible, effective, and culturally appropriate interventions, especially when targeting specific community members such as Aboriginal adults (Quinn et al., 2017).

Furthermore, effective health service planning and delivery are vital components of community development programs, as they contribute to increased availability, accessibility, acceptability, and quality healthcare (Marme, 2021). The burden of chronic diseases underscores the importance of healthcare facilities being readily available and the significance of effective interactions with healthcare providers and respectful service provider attitudes (Mahumud et al., 2022). Additionally, the availability and readiness of healthcare facilities have a direct impact on under-five mortality rates, emphasizing the critical role of accessible and well-prepared healthcare facilities in improving health outcomes (Khan et al., 2022).

In the digital age, the design and analysis of secure personal healthcare systems are essential for ensuring the secure authorization and establishment of security channels, thereby contributing to the effectiveness of healthcare services (Kang et al., 2016). Moreover, the impact of regional smart healthcare services on resident health has been empirically examined, highlighting the potential of smart healthcare services in positively influencing health outcomes (Chen et al., 2022).

In the realm of disease prevention, biomarkers play a crucial role in identifying and addressing islet beta cell stress and death in type 1 diabetes, thereby contributing to the development of effective preventive measures and interventions (Sims et al., 2018). These findings collectively underscore the significance of community development programs in

improving healthcare access and outcomes, particularly in addressing healthcare availability, health indicators, and disease prevention.

3.2. Effectiveness of Community Development Programs on Educational attainment

Community development programs play a crucial role in enhancing educational attainment through various means. Infrastructure development in education, such as the achievement of facilities and infrastructure standards in vocational high schools, has been shown to positively impact educational outcomes (Sugiyono, 2021). Corporate social responsibility frameworks have also been identified as instrumental in improving higher education institutions' infrastructure, aligning with Sustainable Development Goal 4 (Ebekozien et al., 2023). Moreover, the role of institutions like the Islamic Development Bank in enhancing educational infrastructures in countries like Indonesia has been highlighted, emphasizing the significance of such contributions to sustainable development goals (Hannase et al., 2020).

In addition to infrastructure, addressing social and regional disparities is essential for effective community development programs. The impact of intertribal conflict on educational development and the education crisis in Yemen underscores the need for holistic approaches to address social and political challenges that hinder educational progress (Taher et al., 2022). Furthermore, the responsibility and resources for non-formal cultural infrastructure in peripheral regions have been recognized as crucial components in promoting local economies and securing democracy, emphasizing the broader societal impact of educational infrastructure (Fobel, 2022).

These studies collectively highlight the multifaceted nature of community development programs in enhancing educational attainment. They underscore the importance of infrastructure development, corporate social responsibility, addressing social and regional disparities, and the role of international institutions in contributing to sustainable development goals. By considering these diverse aspects, community development programs can effectively contribute to improving educational outcomes and promoting holistic development.

4. Challenges in Implementing Community Development Programs

Challenges in implementing community development programs are multifaceted and require careful consideration of various factors. Limited financial resources pose a significant obstacle to the success of community development initiatives (Ferraz et al., 2019). This challenge is exacerbated by inadequate infrastructure, which hinders the planning, implementation, and maintenance of various projects (Njogu, 2021). Moreover, political instability can disrupt the continuity and effectiveness of community development programs, impacting their sustainability and outcomes (Sweidan, 2016; Murad & Alshyab, 2019; Rugaza, 2022). Additionally, the use of top-down approaches without meaningful community participation can lead to dissatisfaction and hinder the success of development projects (Arifai et al., 2023; Zacarias, 2019).

The limited financial resources available for community development programs can impede the allocation of funds necessary for infrastructure development and maintenance (Ferraz et al., 2019). This can lead to challenges in ensuring the availability of essential resources for the successful implementation of projects, such as water infrastructure in South Africa (Dithebe et al., 2019). Furthermore, the lack of financial resources can hinder the ability of communities to invest in resilience-building measures, particularly in the face of natural disasters and climate change (Zacarias, 2019).

Inadequate infrastructure, including issues related to water infrastructure projects, can significantly impact the success of community development programs (Dithebe et al., 2019; Njogu, 2021). The absence of proper infrastructure planning and maintenance can hinder the delivery of essential services and limit the overall development potential of communities. Moreover, the correlation between community satisfaction and infrastructure development underscores the importance of addressing infrastructure challenges to ensure positive community outcomes (Arifai et al., 2023).

Political instability presents a critical challenge to community development, as it can disrupt governance structures, decision-making processes, and the overall environment for development initiatives (Sweidan, 2016; Murad & Alshyab, 2019; Rugaza, 2022). The impact of political instability on economic growth and government spending further underscores its significance as a barrier to effective community development (Sweidan, 2016; Murad & Alshyab, 2019; Nawaz et al., 2021). Additionally, the interrelationship between political instability and terrorism, particularly in the context of security crises, highlights the multifaceted nature of the challenges faced by communities (Ouoba & Lompo, 2022).

The use of top-down approaches without meaningful community participation can lead to dissatisfaction and hinder the success of development projects (Arifai et al., 2023; Zacarias, 2019). Inadequate community participation can limit

the effectiveness and sustainability of initiatives, as evidenced by the correlation between community satisfaction and infrastructure development (Arifai et al., 2023). Therefore, it is essential to adopt inclusive approaches that prioritize community involvement and empowerment to address the challenges associated with top-down approaches.

In conclusion, the challenges in implementing community development programs are complex and interconnected. Limited financial resources, inadequate infrastructure, political instability, and the use of top-down approaches without meaningful community participation are significant barriers that need to be addressed to ensure the success and sustainability of development initiatives.

5. Improving the Effectiveness of CDPs

Improving the effectiveness of Chronic Disease Prevention and Screening (CDPS) interventions requires tailoring interventions to local contexts, fostering community participation, and implementing robust monitoring and evaluation mechanisms. Tailoring interventions to local contexts is crucial for successful implementation. It involves adapting interventions to fit the specific needs, resources, and cultural aspects of the target population (Wensing, 2017). This approach has been shown to improve the effectiveness of health interventions, including chronic disease prevention and screening programs (Neves et al., 2020). Fostering community participation is another key aspect of effective CDPS interventions. Engaging the community in the design and implementation of interventions can enhance their relevance and acceptability, leading to better outcomes. Community participation has been linked to improved chronic disease prevention and screening outcomes in various settings (Aubrey-Bassler et al., 2019). Implementing robust monitoring and evaluation mechanisms is essential for assessing the impact of CDPS interventions and making evidence-based decisions. It involves systematically collecting and analyzing data to track progress, identify challenges, and make necessary adjustments to the interventions. Effective monitoring and evaluation have been associated with improved implementation and sustainability of health interventions (Sopcak et al., 2017).

6. Case Studies of Community Development Programs in Rural Africa

Community development programs in rural Africa have been the subject of various case studies and effectiveness reviews. Fombad & Jiyane (2016) conducted a case study on the role of community radios in disseminating information to rural women in South Africa, highlighting the significance of such communication channels in rural development and information dissemination to women listeners (Fombad & Jiyane, 2016; Ramaano, 2022) explored the economic-administrative role of geographic information systems in rural tourism and community development in African marginalized communities, emphasizing the potential of geographic information systems in inclusive sustainable rural tourism and community empowerment (Ramaano, 2022; . Ofoegbu et al., 2017) assessed the vulnerability of rural communities to climate change, emphasizing the negative impacts of climate variability and change on rural livelihoods and sustainable forest use in South Africa (Ofoegbu et al., 2017). Additionally, Ramaano (2021) discussed the potential of ecotourism as a mechanism to support community livelihoods, proposing initiatives for ecotourism aligned with local factor endowments to contribute to community development within rural areas (Ramaano, 2021). Furthermore, Ofoegbu et al. (2016) conducted a perception-based analysis of the effect of climate change on forest-based livelihood in the Vhembe District of South Africa, emphasizing the need for forest development initiatives to enhance the resilience of forest-based livelihoods to climate change impacts in rural communities (Ofoegbu et al., 2016).

These studies collectively underscore the multifaceted nature of community development programs in rural Africa, emphasizing the importance of information dissemination, geographic information systems, climate change adaptation, and sustainable livelihood initiatives in fostering effective and sustainable development within rural communities.

7. Future Outlook and Emerging Trends

The future outlook and emerging trends of Community Development Programs in Rural Africa are shaped by various factors such as climate change, healthcare, information dissemination, digitalization, and entrepreneurship. Prioritizing rural development in Southern Africa is crucial for improving the livelihoods of vulnerable groups, including women, children, and youth (Mabhaudhi et al., 2019). Additionally, the impact of climate change in Africa necessitates innovative approaches to livelihood programming that promote resilience among rural communities for sustainable development (Tirivanhu, 2023). Telepharmacy is emerging as a promising solution to enhance healthcare delivery in rural African communities where access to pharmacies and healthcare services is limited (Nwachuya, 2023). Furthermore, the role of community radios in information dissemination to rural women in South Africa has been recognized as part of a comprehensive rural development program (Fombad & Jiyane, 2016).

Moreover, the vulnerability of rural communities to climate change underscores the need to focus on improving socioeconomic conditions and overall sustainable development (Ofoegbu et al., 2017). The COVID-19 pandemic has highlighted the importance of not forgetting rural communities in Africa in responses to health crises (Ogunkola et al., 2020). It is also crucial to address COVID-19 misinformation and infodemics in rural Africa by improving health literacy and information assimilation (Okereke et al., 2021). The deployment of virtual healthcare services and digital health technologies, including teledermatology, during the pandemic emphasizes the need for stakeholder-government-community engagement in South Africa (Mbunge et al., 2022).

Furthermore, the future deployment of fixed broadband services across rural Africa is proposed to stimulate development (Oloyede et al., 2023). The emergence of traditional cafes and restaurants in rural towns and villages has spurred a new trend in sustainable tourism development, highlighting the potential for economic growth in rural areas (Obeidat, 2022). Digital transformation in smallholder farming systems is an area of focus for future development in Africa, emphasizing the need for guidance in digitalization efforts (Abdulai, 2022). Additionally, the development of entrepreneurial enterprises in rural Africa requires the identification of common themes to proffer solutions for their advancement (Boohene & Agyapong, 2017).

Sustainability in rural electrification programs and the formative evaluation of such initiatives are essential for the management and expansion of rural development efforts (López-González et al., 2018). Gender disparities in rural education attainments and agricultural landownership are being addressed to support sustainable development goals and reduce inequality in rural areas (Liu, 2022). Lastly, fostering climate-resilient and sustainable food supply, promoting healthy diets and nutrition, and transforming agricultural and rural economies are strategic research aims to strengthen rural communities (Hidrobo et al., 2020).

8. Recommendation

Community Development Programs (CDPs) in rural Africa have demonstrated positive impacts on poverty reduction, healthcare access, and educational attainment. Success factors include tailored interventions, community participation, and robust monitoring and evaluation mechanisms. Challenges such as limited financial resources, inadequate infrastructure, and political instability persist and need addressing for improved effectiveness.

Policymakers should tailor CDPs to the unique cultural, social, and economic contexts of each rural community. They should prioritize inclusive decision-making processes to ensure the ownership and sustainability of development initiatives.

Practitioners should implement participatory methodologies. They should engage local communities in the planning, execution, and evaluation of CDPs to enhance program relevance. They should strengthen partnerships by collaborating with local organizations, governments, and international agencies to leverage resources and expertise.

Researchers should focus on impact evaluation by conducting rigorous assessments to measure the actual impact of CDPs on key indicators, providing valuable insights for future programs. They should explore innovative approaches by investigating new models, technologies, and strategies that can enhance the efficiency and effectiveness of rural development initiatives.

Long-term impact assessment by investigating the sustained effects of CDPs on rural communities over extended periods, considering factors such as generational changes and evolving socio-economic landscapes. Comparative analysis by conducting comparative studies across different regions, examining the success and challenges of CDPs to identify transferable best practices. Technological innovations by exploring the role of emerging technologies, such as digital platforms and data analytics, in optimizing the design and implementation of CDPs. There is need to examine the integration of climate-resilient strategies within CDPs to address the increasing vulnerabilities of rural communities to climate change.

9. Conclusion

In conclusion, this review underscores the significant impact of Community Development Programs in rural Africa while acknowledging the persisting challenges. Policymakers, practitioners, and researchers must collaborate to refine existing approaches and develop innovative solutions. Emphasizing context-specific interventions, fostering community participation, and embracing rigorous evaluation processes are crucial steps towards maximizing the effectiveness of

CDPs. As the journey towards sustainable rural development continues, a commitment to adaptability and continuous improvement will be key in ensuring positive and lasting outcomes for these communities.

Compliance with ethical standards

Disclosure of conflict of interest

No conflict of interest to be disclosed.

References

- [1] Abdulai, A. (2022). Toward digitalization futures in smallholder farming systems in sub-sahara africa: a social practice proposal. Frontiers in Sustainable Food Systems, 6. https://doi.org/10.3389/fsufs.2022.866331
- [2] Arifai, M., Saiyed, R., Herman, H., & Hardianti, .. (2023). The community satisfaction with village infrastructure development in pinrang regency, south sulawesi, indonesia. Kne Social Sciences. https://doi.org/10.18502/kss.v8i5.13020
- [3] Aubrey-Bassler, K., Fernandes, C., Penney, C., Cullen, R., Meaney, C., Sopcak, N., ... & Manca, D. (2019). The effectiveness of a proven chronic disease prevention and screening intervention in diverse and remote primary care settings: an implementation study on the better 2 program. BJGP Open, 3(3), bjgpopen19X101656. https://doi.org/10.3399/bjgpopen19x101656
- [4] Boohene, R. and Agyapong, D. (2017). Rural entrepreneurship in african countries: a synthesis of related literature. Journal of Small Business and Entrepreneurship Development. https://doi.org/10.15640/jsbed.v5n1a5
- [5] Chen, Y., Zhang, L., & Wei, M. (2022). How does smart healthcare service affect resident health in the digital age? empirical evidence from 105 cities of china. Frontiers in Public Health, 9. https://doi.org/10.3389/fpubh.2021.833687
- [6] Cleveland, M. and Cleveland, S. (2018). Building engaged communities—a collaborative leadership approach. Smart Cities, 1(1), 155-162. https://doi.org/10.3390/smartcities1010009
- [7] Couper, I., Ray, S., Blaauw, D., Ng'wena, G., Muchiri, L., Oyungu, E., ... & Fonn, S. (2018). Curriculum and training needs of mid-level health workers in africa: a situational review from kenya, nigeria, south africa and uganda. BMC Health Services Research, 18(1). https://doi.org/10.1186/s12913-018-3362-9
- [8] Dithebe, K., Aigbavboa, C., & Thwala, W. (2019). An appraisal of water infrastructure projects' financing challenges in south africa., 103-110. https://doi.org/10.1108/s2516-285320190000002022
- [9] Ebekozien, A., Aigbavboa, C., Samsurijan, M., Firdaus, R., & Rohayati, M. (2023). Expanded corporate social responsibility framework: companies' role in improving higher education institutions infrastructure to sustainable development goal 4. Journal of Facilities Management. https://doi.org/10.1108/jfm-11-2022-0120
- [10] Fernald, L., Kagawa, R., Knauer, H., Schnaas, L., Guerra, A., & Neufeld, L. (2017). Promoting child development through group-based parent support within a cash transfer program: experimental effects on children's outcomes.. Developmental Psychology, 53(2), 222-236. https://doi.org/10.1037/dev0000185
- [11] Ferraz, D., Mariano, E., Rebelatto, D., & Hartmann, D. (2019). Linking human development and the financial responsibility of regions: combined index proposals using methods from data envelopment analysis. SSRN Electronic Journal. https://doi.org/10.2139/ssrn.3401374
- [12] Fobel, L. (2022). Non-formal cultural infrastructure in peripheral regions: responsibility, resources, and regional disparities. Urban Planning, 7(4). https://doi.org/10.17645/up.v7i4.5675
- [13] Fombad, M. and Jiyane, G. (2016). The role of community radios in information dissemination to rural women in south africa. Journal of Librarianship and Information Science, 51(1), 47-58. https://doi.org/10.1177/0961000616668960
- [14] Fouche, E. and Brent, A. (2019). Journey towards renewable energy for sustainable development at the local government level: the case of hessequa municipality in south africa. Sustainability, 11(3), 755. https://doi.org/10.3390/su11030755

- [15] Geldsetzer, P., Vaikath, M., Wagner, R., Rohr, J., Montana, L., Gómez-Olivé, F., ... & Berkman, L. (2018). Depressive symptoms and their relation to age and chronic diseases among middle-aged and older adults in rural south africa. The Journals of Gerontology Series A, 74(6), 957-963. https://doi.org/10.1093/gerona/gly145
- [16] Gizaw, Z., Astale, T., & Kassie, G. (2022). What improves access to primary healthcare services in rural communities? a systematic review. BMC Primary Care, 23(1). https://doi.org/10.1186/s12875-022-01919-0
- [17] Hannase, M., Arifah, F., & Annas, S. (2020). The contribution of islamic development bank (idb) in improving educational infrastructures in indonesia: a sustainable development goals (sdgs) perspective. Iop Conference Series Earth and Environmental Science, 436(1), 012027. https://doi.org/10.1088/1755-1315/436/1/012027
- [18] Hidrobo, M., Palloni, G., Aker, J., Gilligan, D., & Ledlie, N. (2020). Paying for digital information: assessing farmers' willingness to pay for a digital agriculture and nutrition service in ghana.. https://doi.org/10.2499/p15738coll2.133591
- [19] Kang, J., Chung, H., Lee, J., & Park, J. (2016). The design and analysis of a secure personal healthcare system based on certificates. Symmetry, 8(11), 129. https://doi.org/10.3390/sym8110129
- [20] Khan, N., Trisha, N., & Rashid, M. (2022). Availability and readiness of healthcare facilities and their effects on under-five mortality in bangladesh: analysis of linked data.. https://doi.org/10.1101/2022.06.22.22276753
- [21] Lane, G. and Vatanparast, H. (2022). Adjusting the canadian healthcare system to meet newcomer needs. International Journal of Environmental Research and Public Health, 19(7), 3752. https://doi.org/10.3390/ijerph19073752
- [22] Liu, S. (2022). Gender disparities in rural education attainments and agricultural landownership from the perspective of sustainable development goals (sdgs): evidence from 16 sub-sahara african countries. Rausp Management Journal, 57(4), 401-412. https://doi.org/10.1108/rausp-01-2022-0031
- [23] López-González, A., Domenech, B., & Ferrer-Martí, L. (2018). Formative evaluation of sustainability in rural electrification programs from a management perspective: a case study from venezuela. Renewable and Sustainable Energy Reviews, 95, 95-109. https://doi.org/10.1016/j.rser.2018.07.024
- [24] Ma, J., Zhang, J., Li, L., Zeng, Z., Sun, J., Zhou, Q., ... & Zhang, Y. (2018). Study on livelihood assets-based spatial differentiation of the income of natural tourism communities. Sustainability, 10(2), 353. https://doi.org/10.3390/su10020353
- [25] Mabhaudhi, T., Nhamo, L., Mpandeli, S., Nhemachena, C., Senzanje, A., Sobratee, N., ... & Modi, A. (2019). The water–energy–food nexus as a tool to transform rural livelihoods and well-being in southern africa. International Journal of Environmental Research and Public Health, 16(16), 2970. https://doi.org/10.3390/ijerph16162970
- [26] Madueke, C., Anisiobi, C., & Ozoh, J. (2022). Foreign direct investment and poverty reduction in nigeria: implication for sustainable development. Asian Journal of Economics Business and Accounting, 1-12. https://doi.org/10.9734/ajeba/2022/v22i24889
- [27] Mahumud, R., Sultana, M., Kundu, S., Rahman, M., Mistry, S., Kamara, J., ... & Renzaho, A. (2022). The burden of chronic diseases and patients' preference for healthcare services among adult patients suffering from chronic diseases in bangladesh. Health Expectations, 25(6), 3259-3273. https://doi.org/10.1111/hex.13634
- [28] Marme, G. (2021). Effective health service planning and delivery: a qualitative case study exploring health service users perspectives.. https://doi.org/10.21203/rs.3.rs-67378/v3
- [29] Mbunge, E., Batani, J., Gaobotse, G., & Muchemwa, B. (2022). Virtual healthcare services and digital health technologies deployed during coronavirus disease 2019 (covid-19) pandemic in south africa: a systematic review. Global Health Journal, 6(2), 102-113. https://doi.org/10.1016/j.glohj.2022.03.001
- [30] Murad, M. and Alshyab, N. (2019). Political instability and its impact on economic growth: the case of jordan. International Journal of Development Issues, 18(3), 366-380. https://doi.org/10.1108/ijdi-02-2019-0036
- [31] Mwadzingeni, L., Mugandani, R., & Mafongoya, P. (2020). Localized institutional actors and smallholder irrigation scheme performance in limpopo province of south africa. Agriculture, 10(9), 418. https://doi.org/10.3390/agriculture10090418
- [32] Nawaz, A., Anwar, U., & Aquil, F. (2021). An economic impact of political instability: an evidence from pakistan. Journal of Economic Impact, 3(1), 47-54. https://doi.org/10.52223/jei3012106

- [33] Ndlovu, W., Mwale, M., & Zuwarimwe, J. (2021). Challenges and critical success factors for rural agrarian reforms in limpopo province, south africa. Agraris Journal of Agribusiness and Rural Development Research, 7(2), 191-206. https://doi.org/10.18196/agraris.v7i2.11272
- [34] Ned, L., Tiwari, R., Hess-April, L., Lorenzo, T., & Chikte, U. (2020). A situational mapping overview of training programmes for community-based rehabilitation workers in southern africa: strategies for strengthening accessible rural rehabilitation practice. Frontiers in Public Health, 8. https://doi.org/10.3389/fpubh.2020.569279
- [35] Neves, P., Luz, F., Vital, E., & Oliveira, J. (2020). Influenza: a board game design experiment on vaccination. Simulation & Gaming, 104687812097789. https://doi.org/10.1177/1046878120977895
- [36] Njogu, H. (2021). Effects of floods on infrastructure users in kenya. Journal of Flood Risk Management, 14(4). https://doi.org/10.1111/jfr3.12746
- [37] Nwachuya, C. (2023). Effectiveness of telepharmacy in rural communities in africa: a scoping review. Journal of Pharmacy Technology, 39(5), 241-246. https://doi.org/10.1177/87551225231190567
- [38] Nyoh, I. (2021). Communicating climate change and energy in rural africa: a case analysis to explain how participatory communication can support transition to renewables and adoption of solar technologies in rural africa. Ciências E Políticas Públicas/ Public Sciences & Policies, 183-200. https://doi.org/10.33167/2184-0644.cpp2021.vviin2/pp.183-200
- [39] Obeidat, W. (2022). Rural and traditional cafes and restaurants: a new emerging trend in domestic tourism. Worldwide Hospitality and Tourism Themes, 15(1), 74-83. https://doi.org/10.1108/whatt-08-2022-0098
- [40] Ofoegbu, C., Chirwa, P., Francis, J., & Babalola, F. (2016). Perception-based analysis of climate change effect on forest-based livelihood: the case of vhembe district in south africa. Jàmbá Journal of Disaster Risk Studies, 8(1). https://doi.org/10.4102/jamba.v8i1.271
- [41] Ofoegbu, C., Chirwa, P., Francis, J., & Babalola, F. (2017). Assessing vulnerability of rural communities to climate change. International Journal of Climate Change Strategies and Management, 9(03), 374-386. https://doi.org/10.1108/ijccsm-04-2016-0044
- [42] Ogunkola, I., Adebisi, Y., Imo, U., Odey, G., Esu, E., & Lucero-Prisno, D. (2020). Rural communities in africa should not be forgotten in responses to covid-19. The International Journal of Health Planning and Management, 35(6), 1302-1305. https://doi.org/10.1002/hpm.3039
- [43] Ogunlusi, A. and Olaniyan, O. (2021). The effects of rural income project on silk exports and livelihood of smallholder producers in gatsibo district, rwanda... https://doi.org/10.21203/rs.3.rs-348978/v1
- [44] Okereke, M., Ukor, N., Ngaruiya, L., Mwansa, C., Alhaj, S., Ogunkola, I., ... & Lucero-Prisno, D. (2021). Covid-19 misinformation and infodemic in rural africa. American Journal of Tropical Medicine and Hygiene, 104(2), 453-456. https://doi.org/10.4269/ajtmh.20-1488
- [45] Oloyede, A., Grace, D., & Faruk, N. (2023). A techno-economic model for future deployment of fixed broadband services to stimulate development across rural africa. International Journal of Mobile Communications, 21(2), 181. https://doi.org/10.1504/ijmc.2023.128819
- [46] Ouoba, M. and Lompo, E. (2022). Terrorism violence: assessing the impact of education programs through mass media on the adoption of security measures in burkina faso. Multidisciplinary Reviews, 5(3), 1-14. https://doi.org/10.31893/multirev.2022013
- [47] Quinn, E., O'Hara, B., Ahmed, N., Winch, S., McGill, B., Banovic, D., ... & Rissel, C. (2017). Enhancing the get healthy information and coaching service for aboriginal adults: evaluation of the process and impact of the program. International Journal for Equity in Health, 16(1). https://doi.org/10.1186/s12939-017-0641-8
- [48] Ramaano, A. (2021). Potential of ecotourism as a mechanism to buoy community livelihoods: the case of musina municipality, limpopo, south africa. Journal of Business and Socio-Economic Development, 1(1), 47-70. https://doi.org/10.1108/jbsed-02-2021-0020
- [49] Ramaano, A. (2022). The economic-administrative role of geographic information systems in rural tourism and exhaustive local community development in african marginalized communities. Arab Gulf Journal of Scientific Research, 40(2), 180-195. https://doi.org/10.1108/agjsr-04-2022-0020

- [50] Roux, K., Davis, E., Gaunt, C., Young, C., Koussa, M., & Harris, C. (2019). A case study of an effective and sustainable antiretroviral therapy program in rural south africa. Aids Patient Care and STDS, 33(11), 466-472. https://doi.org/10.1089/apc.2019.0055
- [51] Rugaza, D. (2022). Political instability as root of armed conflict in the democratic republic of congo. Asian Research Journal of Arts & Social Sciences, 204-214. https://doi.org/10.9734/arjass/2022/v18i3397
- [52] Ruwanza, S., Thondhlana, G., & Falayi, M. (2022). Research progress and conceptual insights on drought impacts and responses among smallholder farmers in south Africa: a review. Land, 11(2), 159. https://doi.org/10.3390/land11020159
- [53] Saepudin, A. and Mulyono, D. (2019). Community education in community development. Empowerment, 8(1), 65. https://doi.org/10.22460/empowerment.v8i1p65-73.1165
- [54] Sims, E., Evans-Molina, C., Tersey, S., Eizirik, D., & Mirmira, R. (2018). Biomarkers of islet beta cell stress and death in type 1 diabetes. Diabetologia, 61(11), 2259-2265. https://doi.org/10.1007/s00125-018-4712-1
- [55] Singh, G., Dubey, M., Singh, S., & Singh, R. (2022). Factors affecting the involvement of tribal youth in agricultural livelihood activities in dindori district of madhya pradesh, india. Asian Journal of Agricultural Extension Economics & Sociology, 452-459. https://doi.org/10.9734/ajaees/2022/v40i931027
- [56] Sopcak, N., Aguilar, C., Nykiforuk, C., O'Brien, M., Aubrey-Bassler, K., Cullen, R., ... & Manca, D. (2017). Patients' perspectives on better 2 prevention and screening: qualitative findings from newfoundland & amp; labrador. BJGP Open, 1(3), bjgpopen17X101037. https://doi.org/10.3399/bjgpopen17x101037
- [57] Sugiyono, S. (2021). The evaluation of facilities and infrastructure standards achievement of vocational high school in the special region of yogyakarta. Jurnal Penelitian Dan Evaluasi Pendidikan, 25(2). https://doi.org/10.21831/pep.v25i2.46002
- [58] Sun, R., Mi, J., Cao, S., & Gong, X. (2019). Classifying livelihood strategies adopting the activity choice approach in rural china. Sustainability, 11(11), 3019. https://doi.org/10.3390/su11113019
- [59] Sweidan, O. (2016). Political instability and economic growth: evidence from jordan. Review of Middle East Economics and Finance, 12(3). https://doi.org/10.1515/rmeef-2015-0025
- [60] Taher, A., Khan, Z., Alduais, A., & Muthanna, A. (2022). Intertribal conflict, educational development and education crisis in yemen: a call for saving education. Review of Education, 10(3). https://doi.org/10.1002/rev3.3376
- [61] Tirivanhu, P. (2023). A framework for facilitating holistic interventions for building community resilience to climate change for sustainable community development.. https://doi.org/10.5772/intechopen.102977
- [62] Tirivanhu, P. (2023). A framework for facilitating holistic interventions for building community resilience to climate change for sustainable community development.. https://doi.org/10.5772/intechopen.102977
- [63] Triyowati, H., Masnita, Y., & Khomsiyah, K. (2019). Social & amp; financial inclusion activities and it's impact on improving the welfare of society.. https://doi.org/10.4108/eai.8-10-2018.2288682
- [64] Wensing, M. (2017). The tailored implementation in chronic diseases (ticd) project: introduction and main findings. Implementation Science, 12(1). https://doi.org/10.1186/s13012-016-0536-x
- [65] Zacarias, D. (2019). Understanding community vulnerability to climate change and variability at a coastal municipality in southern mozambique. International Journal of Climate Change Strategies and Management, 11(1), 154-176. https://doi.org/10.1108/ijccsm-07-2017-0145