

Review

Integrating Rural Development, Education, and Management: Challenges and Strategies

Yang Yu ¹, Desmond Appiah ^{2,*}, Bernard Zulu ³ and Kofi Asamoah Adu-Poku ⁴¹ Jingjiang College, Jiangsu University, Zhenjiang 212100, China; 1000910080@ujs.edu.cn² Department of Physics Education, University of Education, Winneba P.O. Box 25, Ghana³ Sioma Town Council, Ministry of Local Government and Rural Development, Lusaka P.O. Box 920085, Zambia; bentryzulu176@gmail.com⁴ Department of Mechanical and Manufacturing Engineering, University of Energy and Natural Resources, Sunyani P.O. Box 214, Ghana; kofi.adu-poku@uenr.edu.gh

* Correspondence: deappiah@uew.edu.gh

Abstract: This review explores the complexities of integrated rural development, education, and management, focusing on the challenges encountered and the strategies employed to address them. Integrating various sectors and disciplines in rural development initiatives presents unique obstacles, including coordination issues, resource constraints, and stakeholder engagement difficulties. By examining the existing literature and case studies, this review identifies key challenges, such as limited institutional capacity, inadequate funding, and the need for multidisciplinary collaboration. Furthermore, it analyzes strategies such as community involvement, capacity building, and innovative technology adoption to overcome these obstacles. The review emphasizes the importance of tailored approaches considering local contexts and empowering rural communities in decision-making processes. This approach is essential for the sustainability of rural areas because it ensures that interventions are context-specific, culturally appropriate, and resource-efficient, ultimately leading to more effective and sustainable outcomes. By understanding and addressing the challenges while implementing effective strategies, integrated rural development, education, and management can lead to sustainable and inclusive development outcomes in rural areas.

Keywords: rural development; education; technology; management



Citation: Yu, Y.; Appiah, D.; Zulu, B.; Adu-Poku, K.A. Integrating Rural Development, Education, and Management: Challenges and Strategies. *Sustainability* **2024**, *16*, 6474. <https://doi.org/10.3390/su16156474>

Academic Editors: José Benito Vázquez Dorrió, Araceli Queiruga-Dios, Manuel Filipe P. C. M. Costa and Miguel Ángel Queiruga Dios

Received: 24 May 2024
Revised: 17 July 2024
Accepted: 25 July 2024
Published: 29 July 2024



Copyright: © 2024 by the authors. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (<https://creativecommons.org/licenses/by/4.0/>).

1. Introduction

1.1. Background of the Study

The global community, including many governments and organizations, has increasingly emphasized the importance of rural development to achieve the Sustainable Development Goals [1]. Recently, efforts have been made to address poverty, hunger, health, education, and other key indicators in rural areas.

Rural areas are geographic regions outside cities and towns, characterized by a low population density, large open spaces, and a prevalence of agricultural or undeveloped land. These areas often have smaller populations, with communities that are spread out rather than densely packed. Rural regions typically lack the extensive infrastructure and services found in urban areas, such as comprehensive public transportation systems, high-speed Internet access, and specialized healthcare facilities [2].

In contrast (Table 1), urban areas are characterized by a high population density, extensive infrastructure, and a concentration of services and amenities. Urban regions include cities and towns with well-developed road networks, public transportation, and various commercial, residential, and industrial buildings. These areas are hubs of economic activity, cultural institutions, and social services, providing residents with more job opportunities, educational facilities, and healthcare options compared to rural areas [3,4].

Table 1. Key differences between rural and urban areas.

Aspect	Rural Areas	Urban Areas
Population Density	Low population density; communities are spread out	High population density; people live in close proximity
Infrastructure	Limited infrastructure: fewer roads, public transport, and utilities	Extensive infrastructure: well-developed roads, public transport, and utilities
Economic Activities	Predominantly agriculture, forestry, and mining areas	Diverse economy includes industry, services, commerce, and finance
Access to Services	Limited access to healthcare, education, and recreational facilities; residents may need to travel long distances	Greater access to healthcare, education, and recreational facilities; services are readily available

Source: United Nations Department of Economic and Social Affairs (2018) [5].

According to the U.S. Census Bureau, rural areas include all population, housing, and territory not included within an urbanized area or urban cluster. Urbanized areas have populations of 50,000 or more, and urban clusters have populations between 2500 and 50,000. The United Nations defines urban areas as places with a population density of at least 1000 people per square mile and rural areas as all regions outside of urban areas [6].

Traditionally, rural development was described as the growth of agricultural areas and highlighted the high level of agricultural output in the year prior, or more accurately, before 1970 [7]. By the early 1980s, according to Harrison, the World Bank defined it as “a strategy aiming at the improvement of economic and social living conditions, focusing on a specific group of poor people in a rural area. It assists the poorest group living in rural areas to benefit from development” [8].

However, in the current context, the term is used broadly to refer to development in rural areas as a whole, which includes the provision of all necessities for high-quality healthcare, education, and other services, as well as the availability of market areas, well-developed infrastructure, improved production, and greater employment opportunities in the surrounding areas [9]. As the paradigm for economic development evolved from “growth” to the more inclusive term “development”, the idea of rural development started to be utilized in a wider sense [10].

In the tapestry of rural life, development is not merely a quest for economic growth rate, but a holistic journey that considers the intricate threads of social inclusivity, environmental sustainability, and cultural richness [11]. The pursuit of rural development recognizes that the heartbeat of a nation lies not only in its bustling cities, but equally in the serene landscapes and fertile fields that characterize rural regions [12].

Rural areas can be a “hot spot” for development if the priorities for each town can be precisely determined [13]. To put it another way, geographical features and even agricultural potential can transform rural places into “hotspots”; tourism, which is the overall development plan for these areas, cannot be the only thing rescuing sustainable rural development. In the ecological sciences and, more recently, in the literature on innovation, the phrase “hot spot” is frequently employed to designate a location that is crucial to its sustainability and growth [13].

For the following reasons, development cooperation with an emphasis on rural development is crucial to reducing poverty:

1. Approximately 75 percent of the globe’s underprivileged people reside in rural areas [14].
2. Most impoverished individuals in urban areas are former farmers and migrant laborers from rural areas. Thus, excessive population influxes to cities should be curbed, resulting in a decrease in poverty in the cities, provided living standards and income

generations in rural areas are improved and rural immigrants to cities return to rural areas [15,16].

3. Enhancing rural communities can act as a safety net when employment opportunities in cities are scarce owing to unstable economic conditions [17]. Additionally, a lot of developing-nation governments have been moving toward decentralization lately to effectively address local needs. Rural development is gaining more attention since decentralization requires a vibrant local economy [9,18,19].

1.2. Problem Statement

The primary research problem is to identify the key challenges hindering the effective implementation of integrated rural development programs and to propose viable strategies to overcome these challenges.

1.3. Significance of the Study

Addressing this research problem is vital for policymakers, educators, and development practitioners. By understanding and overcoming the challenges, it is possible to enhance the socio-economic development of rural areas, thereby reducing urban–rural disparities and promoting sustainable development.

1.4. Research Questions

1. What are the primary challenges faced in integrating rural development, education, and management in Sub-Saharan Africa?
2. How do socio-economic factors influence the effectiveness of integrated rural development initiatives in Sub-Saharan Africa?
3. What roles does education play in enhancing rural development outcomes in Sub-Saharan Africa?
4. What are the key strategies for overcoming barriers in integrated rural development and education management in Sub-Saharan Africa?
5. What are the impacts of policy interventions on integrated rural development and education management in Sub-Saharan Africa?
6. How do community involvement and participation affect the success of integrated rural development initiatives in Sub-Saharan Africa?

1.5. Methodology

To explore the challenges and strategies in integrated rural development, education, and management, we conducted a systematic literature review (SLR). The process included defining specific search terms and selecting appropriate databases to identify relevant academic journals, books, policy reports, government documents, and case studies. Using Boolean operators, we developed a comprehensive search string combining key concepts and their synonyms. The search string included: (“integrated rural development”, OR “rural development” OR “sustainable rural development”) AND (“education” OR “educational programs” OR “training” OR “capacity building”) AND (“management” OR “management practices” OR “administration” OR “governance”) AND (“challenges” OR “obstacles” OR “barriers” OR “issues”) AND (“strategies” OR “approaches” OR “solutions” OR “interventions”), “policy implications” AND “rural development”, “rural development theory AND “education challenges in rural areas”, “sustainable rural livelihoods”, AND “management practices”, “rural poverty reduction” AND “policy frameworks”, “community-based rural development”, AND “education infrastructure”, “Agriculture management”, AND “rural development policies”, Rural infrastructure development” AND “education access”.

We searched the selected databases using the defined search terms, recording the number of results. Titles and abstracts of the retrieved articles were screened to remove irrelevant studies. Full texts of potentially relevant articles were reviewed against the

inclusion/exclusion criteria. Data were extracted from included studies on objectives, methodologies, key findings, and implications.

The quality of included studies was assessed based on study design, sample size, data collection methods, validity and reliability of findings, and relevance to the research question.

Total publications retrieved:

- Academic Journals: 480 articles.
- Books: 15 books.
- Policy Reports and Government Documents: 40 reports/documents.
- Case Studies: 60 case studies.

After screening and full-text reviews:

- Academic Journals: 130 relevant articles.
- Books: 5 relevant books.
- Policy Reports and Government Documents: 15 relevant reports/documents.
- Case Studies: 20 relevant case studies.

Only studies meeting quality standards were included in the final review.

The inclusion criteria were:

- Published within the last 20 years.
- Peer-reviewed articles, books, policy reports, government documents, and case studies.
- Relevant to integrated rural development, education, and management.
- Written in English.

The exclusion criteria were:

- Articles not related to rural development.
- Non-peer-reviewed sources (unless relevant policy reports or government documents).
- Studies focused solely on urban contexts.

Several models and frameworks were reviewed to provide a structured and comprehensive analysis. These include: the sustainable livelihoods framework (SLF), which looked at how to identify vulnerabilities and formulate strategies to build resilience through an integrated approach [20,21]; the integrated rural development program (IRDP) model was reviewed to help understand the coordination and resource allocation issues inherent in multi-sectoral programs [22,23]; the participatory rural appraisal (PRA) was reviewed to help come up with the strategy to overcome barriers to participate and ensure that community voices are effectively integrated into development plans [24,25]; the capacity development framework was reviewed to help identify gaps in capacity and developing targeted training and support mechanisms [26]; and the human capital theory was reviewed to understand how to overcome barriers to access and quality of education [27,28].

Studies by [29–35] have conceptualized rural development in a variety of ways; they have thought of it as several objectives and plans, as well as a unified approach, ideology, or even strategy. The relevant literature has a vague scope and lacks well-established analytical boundaries from comprehensive perspectives. A comprehensive perspective in rural development recognizes that these elements are interrelated and that progress in one area often depends on advancements in others [36]. However, the notion has often possessed a nature constituting both strengths and weaknesses. Its ambiguity implies complicating conceptual clarity [37].

2. Rural Development: Concepts and Dimensions

The concept of “integrated rural development” presents a promising strategy for addressing the multifaceted challenges prevalent in rural communities [38]. It illustrates the interconnected components of integrated rural development, including education, management, infrastructure, livelihoods, social services, and environmental sustainability, which cannot be treated independently [39,40]. It is, therefore, imperative to apply an integrated strategy toward rural development. It integrates all aspects of rural lifestyle—high-quality

healthcare, education, and other services, as well as the availability of market areas, well-developed infrastructure, improved production, and greater employment opportunities, fostering entrepreneurship, and enhancing income-generating activities in the surrounding areas—which are all part of an integrated approach to rural development [39,41].

The rural development concept has changed over time, reflecting the dynamic nature of rural communities and the diverse challenges they face [40,42]. The lack of a political consensus for local development, the lack of feasibility studies for the program, the inability to prioritize projects for rural development, and the absence of local institutions appear to be contributing factors to the unsatisfactory output of local or rural developments [40,43]. Therefore, understanding the concepts and dimensions of rural development is essential for formulating effective policies and strategies that address the unique needs and aspirations of rural populations [37]. It is imperative to link development to both individual achievement and a high quality of life. However, every individual desires to live without servitude. They desire to live with dignity, self-identity, and respect for themselves. Thus, progress involves social, cultural, and political realizations in addition to economic considerations [44].

Rural development concepts have evolved significantly over time, reflecting changes in theoretical perspectives and global development paradigms:

- Community Development (1950s–1960s)—Early rural development efforts in Africa focused on community development, which aimed at improving living standards through local self-help and government support. The emphasis was on building infrastructure, improving health and education, and promoting agricultural practices [45,46].
- Integrated Rural Development (1970s–1980s)—This concept emerged as a response to the limitations of community development. It aimed at a holistic approach, integrating various sectors, such as agriculture, health, education, and infrastructure. The focus was on coordinated efforts to tackle rural poverty comprehensively [47].
- Sustainable Development (1990s–present)—The Brundtland Report in 1987 popularized the concept of sustainable development, which balances economic growth, social equity, and environmental protection. In the context of rural development, this approach emphasizes sustainable agricultural practices, the conservation of natural resources, and inclusive economic growth [48].
- Participatory and Bottom-Up Approaches (2000s–present)—There has been a growing recognition of the importance of involving rural communities in the development process. Participatory approaches encourage local decision making, capacity building, and the empowerment of marginalized groups. This shift reflects a move toward more democratic and inclusive development practices [25].

To illustrate these theoretical frameworks and concepts, this study examines rural development processes in some countries in Sub-Saharan Africa, like Kenya, Nigeria, and Ethiopia:

- Kenya’s rural development has been influenced by various theoretical approaches over the years. The country has implemented integrated rural development programs aimed at improving agricultural productivity, infrastructure, and social services. The participatory rural appraisal (PRA) approach has been particularly significant, involving local communities in planning and implementing development projects [25,49].
- Nigeria’s rural development has faced challenges such as inadequate infrastructure, poor governance, and socio-political instability. The country has adopted various strategies, including the National Economic Empowerment and Development Strategy (NEEDS), which integrates economic growth with social development. Participatory approaches are increasingly being used to involve rural communities in development initiatives [28,50].
- Ethiopia has pursued rural development through policies like the Agricultural Development-Led Industrialization (ADLI) strategy. This strategy focuses on improving agricultural productivity to drive industrialization and economic growth.

The Sustainable Land Management Program (SLMP) is another example, aiming at sustainable agricultural practices and environmental conservation.

3. Education in Rural Areas

Education serves as a catalyst for individual empowerment through the provision of knowledge, skills, and critical thinking capabilities for societal progress [51,52]. Empowered individuals become agents of change, capable of contributing to their communities and participating in the decision-making processes that shape their destinies. It also instills resilience and adaptability, enabling communities to face challenges, overcome adversity, and envision a future beyond immediate constraints. Resilient communities are better positioned to respond to socio-economic changes, environmental shifts, and global challenges [53].

Education has a positive, regulating effect on the development of the rural community, individual, family, and society, which reduces poverty and controls unemployment [54,55]. Education is essential for several reasons, including social development, enhancing individual living standards, increasing income levels in rural areas, creating employment opportunities, and bringing rights awareness to the community. In the vast and varied landscapes of rural areas, the transformative power of education takes on a profound significance [56,57]. Therefore, education should be considered the primary right of every person in the world.

Figure 1 shows how education can help people develop as individuals and as communities, and how it can open doors to many opportunities [58]. As a result, education in rural regions needs to be viewed as a vital instrument for maximizing human potential and preparing people for global challenges.

Embracing Education as a Pathway to Success

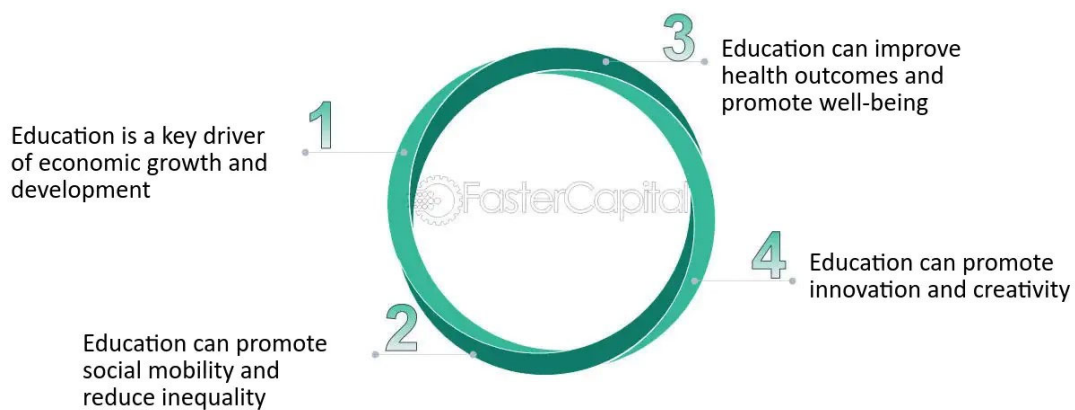


Figure 1. Embracing education as a pathway to success. Source: *European Journal of Education* (2015) [58].

Figure 2 shows how integrating the learning regional model and the triple helix thesis might aid regional learning and creativity in rural regions using three steps:

1. First, the framework's elements must be altered to take into consideration the wide range of participants and endeavors that support area-based development, especially in rural areas.
2. Secondly, it is important to take into account the kind of interactions that have been researched to promote the transfer of information and human resources from academia to industry.
3. Thirdly, current arrangements can be assessed using the heuristic framework [59].

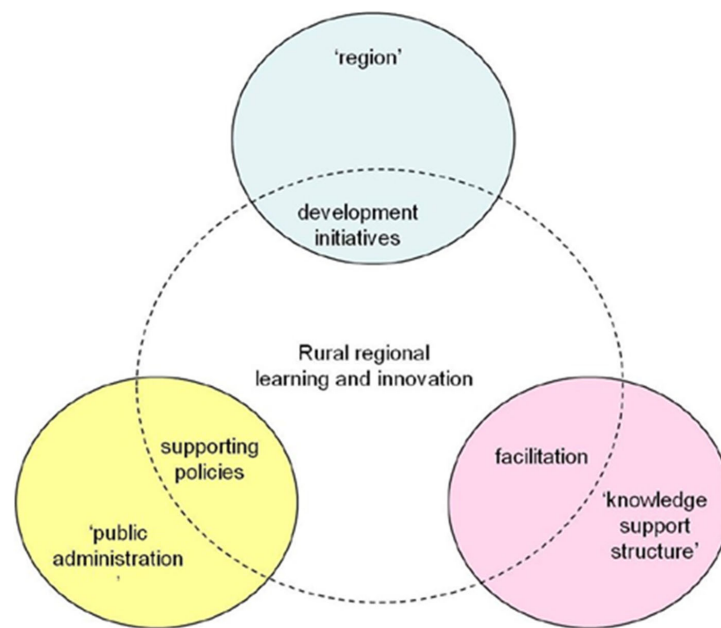


Figure 2. Integrated conceptual framework of rural regional learning. Source: Wellbrock (2012) [59].

The integrated framework can effectively serve as a versatile tool that can foster regional education and creative processes and can increase capacity and sharpen the critical thinking skills of all parties who contribute to the development of a rural region [60].

3.1. Challenges Faced by Rural Education

Rural education, while a noble and necessary endeavor, is rife with challenges and barriers that often impede the journey toward sustainable progress. These hurdles are complex and multifaceted, rooted in geographical, socio-economic, and institutional factors [61,62].

Figure 3 demonstrates the complex and multifaceted nature of providing quality education in rural areas, more especially when young children advance through the various stages of the educational system and become more mature, while the provision of education tends to be located away from the homes of learners [63].



Figure 3. Delivering quality education in rural communities. Source: OECD (2019) [63].

Around the world, a large percentage of children who have no access to school dwell in remote areas. There is less probability that students attending school in rural areas will complete primary school or advance to secondary education. On tests, they perform worse. Lower earnings and worse life experiences are correlated with lower academic achievement and lower acquisition of skills [64]. In the majority of developing countries, rural areas still have poor educational standards; children must travel great distances to access facilities; most schools lack access to clean drinking water; and this has resulted in high dropout rates in rural areas [62].

Figure 4 shows that children who cannot afford education in Africa range from a high of 78% in Mali, 75% in Niger, 74% in Nigeria, 73% in Guinea, 65% in Senegal, 63% in Mauritania, 62% in Liberia, 57% in Chad, and 49% in Ivory Coast.

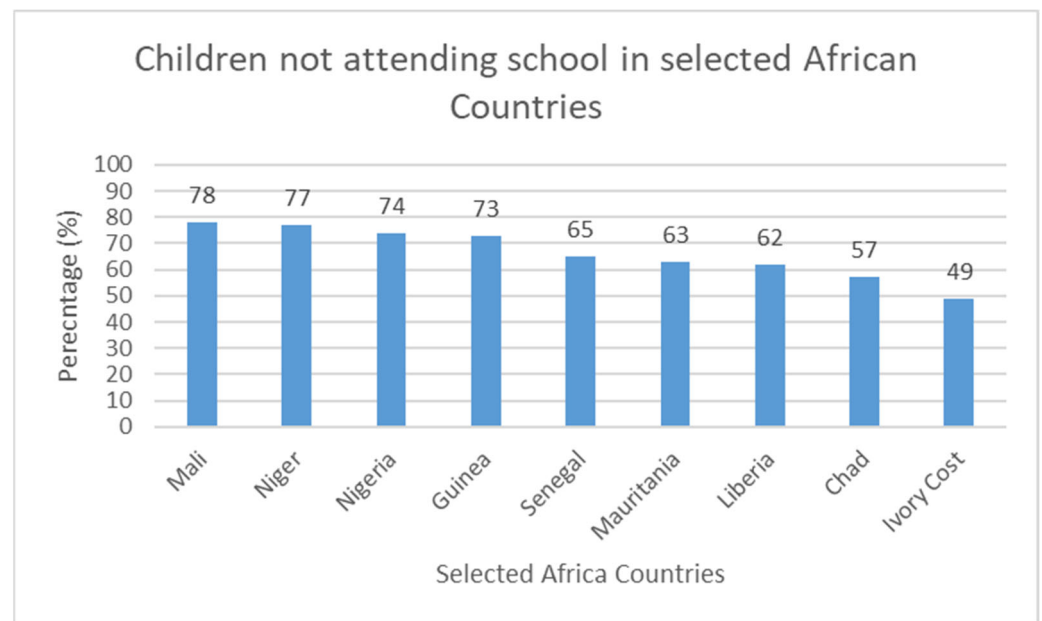


Figure 4. Children from poor families not attending school in selected African countries as of 2020. Source: Saifaddin Galal (2020) [65].

Rural schools experience specific challenges because of their geographical location, ethnic segregation, and lack of resources for both the community and schools [66]. For several reasons, including lower pay scales, many rural schools struggle to recruit and retain teachers, and due to budgetary and human resource limitations, the schools face challenges in providing a full curriculum that includes advanced placement, the upper level, and vocational programs [67]. Having a higher level of education can increase one's job opportunities, increase the number of occupations for which one is qualified, and maybe enhance income potential [68,69].

Table 2 shows some unique challenges that can hinder the quality of education and limit opportunities for students in rural areas. Policies influenced by political considerations might not prioritize incentives for teachers to work in rural areas [70]. This can lead to a shortage of qualified teachers in rural schools, where challenges of isolation, lower pay, and few professional development opportunities make it hard to attract and retain educators [23]. Political decisions often determine how resources are allocated, and rural areas frequently receive less funding as compared to urban regions [71].

Table 2. Factors affecting the significance and standard of rural education (RE).

RE Problem Area	External Factors	Internal Factors
Less support from the nation to RE	Rural communities' declining political influence	Inability to convince policymakers of the benefits of RE
Reduced government and donor funding to RE	Inadequate government financial assistance and political pressure to accept more learners	Lack of inventiveness and belief that the government will fund the project
Secluding RE from the National Center for Education system	Isolated location of RE institution	RE management's inability to form partnerships outside of RE and adapt to the diverse demands of a sector that is changing
Internal vacancy advertising and promotion of staff who are already in the system	Lack of recruitment standards or the inability of relevant organizations to enforce them	The closed-off kind of RE communities
High unemployment among graduates and employers' discontent with the performance of graduates	Low employment opportunities in the public sector	RE overlooks the power of conducting a market analysis and maintaining a good relationship with stakeholders in education or potential future employers
Little knowledge of Information and Communication Technology (ICT)	Poor funding	Leaders have little knowledge of ICT skills

Source: *Asian Journal of Agriculture and Development* (2005) [70].

Rural areas often lack institutions such as local development agencies, non-profit, or advisory services that can assist with project development and funding applications [72]. This institutional gap makes it difficult for rural communities to access the technical assistance they need [49]. Lower levels of educational attainment in rural areas can hinder residents' ability to conceptualize and manage complex projects. Education systems in rural areas often do not provide adequate training in project management, entrepreneurship, or proposal writing [73].

Language barriers between societal subcultures also pose challenges, especially to the staff who cannot speak the right language. It usually affects the level of communication between parents of students with disabilities and the school [74,75]. The existence of culturally diverse populations typically prompts the search for personnel who are conversant in the minority language and understand the unique demands and characteristics of the subcultures [76]. People who possess these qualities along with the necessary certification credentials are scarce in rural areas. It is more challenging for school in rural areas to identify and plan for students in some subcultures because they place a lower priority on education than the general public [77]. Mestry, R. and Govindasamy, V. (2021) [78] reported that parents, educators, school board members, and administrators are resistant to changing the curriculum. Attempts to change existing decisions, values, and procedures sometimes encounter strong opposition because these are seen as having been formed with the best interests of children in mind [79].

The great majority of rural dwellers are usually traditionalists. Plaatjie, S.R. (2020) [80] mentioned an overall lack of confidence in innovations and a reluctance to modify procedures in the absence of a convincing argument that doing so will enhance the current state of affairs.

Rural schools frequently struggle with a lack of resources, such as inadequate funds, outdated educational materials, and a shortage of teachers. Quality of education may

be compromised, leading to disparities in learning outcomes between rural and urban areas [67]. Economic challenges in rural communities may result in a lack of awareness about the importance of education and financial barriers to schooling. Lower enrollment rates and higher dropout rates contribute to a cycle of limited educational attainment [62].

Persistent poverty and lack of employment opportunities are prevalent challenges in many rural areas. Limited economic opportunities contribute to lower living standards and hinder overall community development. Inadequate educational infrastructure and limited access to quality education in rural areas. Education gaps perpetuate socio-economic disparities, hindering the ability of individuals to break the cycle of poverty [81–83].

Given that most people in rural areas struggle to make ends meet, there is pressure on the environment. Environmental resources are therefore valuable economic resources. The sustainable use of the environment is crucial to a high quality of life in the twenty-first century. As seen in Figure 5, the 2017 Poverty Statistics in Africa report from the United Nations Development Programme shows that poverty rates in Africa range from the highest to the lowest (Figure 5) [73].

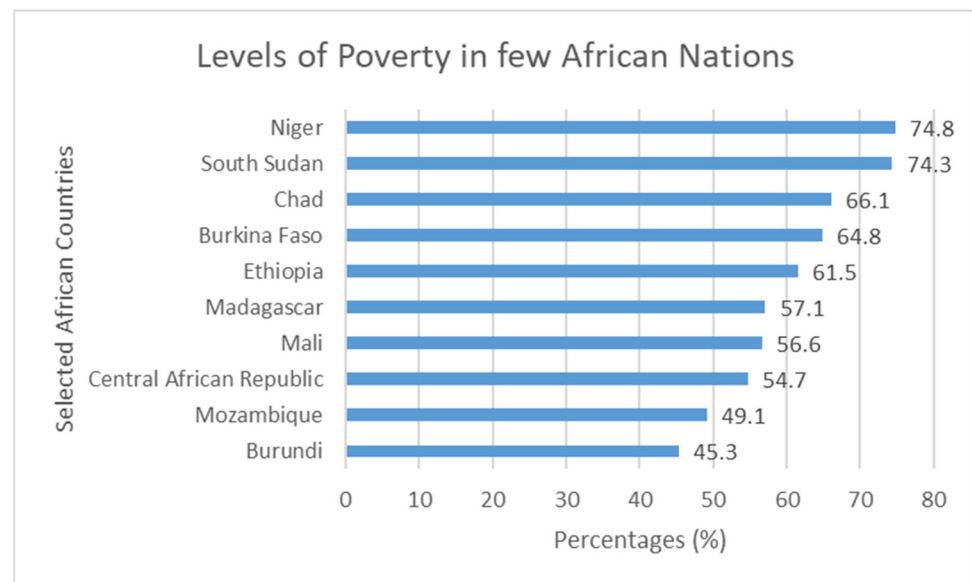


Figure 5. Levels of poverty in a few African nations. Source: United Nations Development Programme, 2019 (<https://hdr.undp.org/content/2019-global-multidimensional-poverty-index-mpi>, accessed on 14 September 2020).

3.2. Strategies for Overcoming Challenges in Rural Education

Amidst the challenges that define rural landscapes, there lies a wealth of opportunities and best practices that, when harnessed effectively, can spark transformative development [84]. The narrative of rural development is evolving, shifting from a focus on deficits to one that emphasizes assets, resilience, and sustainable practices.

The modern world has become more interconnected, and communication is a key factor in bridging the knowledge gap between individuals [85]. But, even while telecom infrastructure has advanced significantly, access to dependable, fast Internet connectivity remains a major challenge for rural people [86]. Infrastructure development for public transportation, local roadways, communications networks, and rural electrification are all crucial components of transportation and telecommunications infrastructure development. It improves social and human capacities [87]. For instance, the use of medical equipment and the storage of medical supplies in healthcare institutions are made easier by rural electrification (vaccines, for instance, are stored in refrigerators) [88]. Moreover, the advancement of information and transportation infrastructure raises people's awareness as citizens and improves their capacities by supplying them with the knowledge and information required for community life [89].

Enhancements in technology accessibility to rural communities may significantly affect society. Rural communities require both the extension of existing technology to remote locations and the adaptation of emerging technologies to these settings. Planning, development, and research in technology are essential components of rural development [90]. A long-lasting understanding of sustainable farming practices that stabilize the environment without depleting its natural resources can be fostered among African smallholder farmers through the openness and accessibility of agricultural information and expertise [91]. To increase agricultural production and raise the living standards, people and communities working in the agriculture industry require accurate, fast, and trustworthy information. The agriculture industry is especially susceptible to the destructive effects of weather. Advances in technology can be extremely important in protecting agriculture from weather-related impacts [92]. Thus, millions of individuals across the continent of Africa could engage in more economic activity and poverty reduction if they had access to knowledge and information resources [93,94]. See Table 3.

Table 3. World Internet usage and population.

World Regions	Population (2020 Est)	Population % of World	Internet Users 31 May 2020	Penetration Rate (% Pop.)	Growth 2000–2020	Internet World %
Africa	1,340,598,447	17.2%	526,710,313	39.3%	11.567%	11.3%
Asia	4,294,516,659	55.1%	2,366,213,308	55.1%	1.970%	50.9%
Europe	834,995,197	10.7%	727,848,547	87.2%	592%	15.7%
Latin America/Caribbean	658,345,826	8.5%	453,702,292	68.9%	2.411%	10.0%
Middle East	260,991,690	3.3%	183,212,099	70.2%	5.477%	3.9%
North America	368,869,647	4.7%	348,908,868	94.6%	223%	7.5%
Oceania/Australia	42,690,838	0.5%	28,917,600	67.7%	279%	0.6%
WORLD TOTAL	7,796,949,710	100.0%	4,648,228,067	59.6%	1,187%	100.0%

Source: Internet World Stats (2020) (<https://www.internetworldstats.com/>, accessed on 14 September 2020).

Access to digital tools and the rate of digital literacy go hand in hand [95]. The Internet World Stats estimates that 39.3% of Africans will have access to the Internet in 2020, and the Global System for Mobile Communications (GSMA) reports that 45% of Sub-Saharan Africans had mobile service subscriptions at the end of 2019 [96]. Even though Internet and mobile adoption are still lagging in Africa, the continent's population is growing faster than ever before, and Africans are demonstrating a strong desire to close the global digital divide and embrace the fast advancements in technology [97]. Poverty is the first obstacle to the spread of digital literacy in developing nations. The cost of digital infrastructure and inadequate support for information technology have impeded the progress of education in most rural areas. By evaluating the additional expenses to pupils, schools are attempting to ensure sustainable access to ICT infrastructure [94]. However, several people oppose this practice because they believe it discriminates against those in lower-income nations who cannot afford it. Finally, given that there are still inefficiencies in the supply of electricity across the continent, infrastructure is a problem.

Community involvement and participation are critical for the success of integrated rural development initiatives in Sub-Saharan Africa, particularly in the context of education and resource management. By addressing challenges through strategic engagement and capacity building, these initiatives can achieve sustainable and impactful outcomes [98]. Enhanced educational performance, improved agricultural productivity, and sustainable resource management are some of the tangible benefits of community participation in rural development [99].

Uganda's Functional Adult Literacy (FAL) Program. Community involvement in the FAL program significantly improved literacy rates among adults. By engaging community members in teaching and curriculum development, the program ensured that educational content was relevant and practical. This participatory approach not only enhanced literacy, but also empowered learners, leading to broader socio-economic benefits [100] Kenya's Community Schools Initiative. In Kenya, community-managed schools have shown better performance compared to centrally managed ones. The active participation of parents and local leaders in school management improved accountability, resource allocation, and educational outcomes. This involvement led to higher enrollment rates, reduced dropout rates, and improved academic performance [101].

Ethiopia's Participatory Agricultural Development. Community participation in agricultural education and extension services led to the increased adoption of improved farming practices. Farmers' involvement in the design and dissemination of agricultural knowledge ensured that the practices were contextually appropriate and sustainable. This engagement resulted in higher crop yields and better food security [102].

Ghana's Farmer Field Schools (FFSs). The FFS approach, which involves farmers in hands-on learning and experimentation, improved agricultural productivity and sustainability. By fostering peer-to-peer learning and community-led experiments, FFSs empowered farmers to adopt and adapt new technologies, enhancing their resilience to environmental challenges [103].

Tanzania's Joint Forest Management (JFM). Community involvement in forest management through JFM led to significant improvements in forest conservation and biodiversity. By integrating local knowledge and practices, the initiatives promoted sustainable forest use and enhanced the livelihoods of community members involved in conservation activities [104].

Nigeria's Community-Based Natural Resource Management (CBNRM). In Nigeria, CBNRM projects that engaged communities in the management of water and land resources resulted in more sustainable and equitable resource use. Community participation ensured that management strategies were locally appropriate and had greater buy-in, reducing conflicts and promoting sustainable practices [105].

By involving local communities in the planning and implementation processes, tailored approaches promote a sense of ownership and responsibility among residents. This enhances the likelihood of successful and sustained interventions. Community-driven development projects are often more sustainable because they reflect the actual needs and capacities of the people [106].

4. Management Practices and Policy Implications in Rural Development

Effective management is the linchpin of successful rural development initiatives, acting as the guiding force that transforms vision into tangible progress. In the intricate tapestry of rural landscapes, management practices play a pivotal role in navigating challenges, optimizing resources, and fostering sustainable development [39].

Many rural development efforts in Africa employed the top-down approach [107–110]. Partly in reaction to this past practice, grassroots development efforts have emerged with villagers playing a leading role [111]. It has become a major trend among donors to encourage residents to participate from the initial stage of development, valuing the communal function of existing villages. The members of the core organization in this case may vary depending on the specific country, region or purpose and character of a project [112]. They may consist of traditional and religious leaders of villages selected by local residents with due attention paid to the social and cultural aspects of village life [113].

Another approach being employed in rural development in Sub-Saharan Africa is the tailored approach, which involves creating and implementing strategies specifically designed to address the unique needs, challenges, and opportunities of rural areas. This approach acknowledges that rural regions are not homogenous and that a one-size-fits-all solution is often ineffective. Instead, tailored development focuses on local conditions,

resources, and aspirations to promote sustainable growth and enhance the quality of life for rural populations. Tailored approaches ensure that development strategies are grounded in the specific environmental, economic, and social contexts of rural areas. This helps in designing interventions that are more relevant and effective. For instance, agricultural practices can be adapted to local climate conditions and soil types, improving productivity and sustainability [114].

Tailored strategies emphasize the efficient use of local resources, which is crucial for environmental sustainability. For example, leveraging local knowledge and traditional practices can lead to more sustainable management of natural resources, such as water and forests [115]. Rural areas often rely heavily on agriculture and natural resources. A tailored approach can identify and develop other potential economic activities suited to local conditions, such as ecotourism, artisanal crafts, or renewable energy projects. Diversifying the rural economy can reduce vulnerability to economic shocks and contribute to long-term sustainability [116]. Addressing the specific infrastructural needs of rural areas, such as transportation, healthcare, and education, can significantly enhance the sustainability of development efforts. Tailored approaches can prioritize investments that have the most significant impact on local communities, improving access and quality of life [116].

Tailored development requires supportive policies and governance structures that recognize the distinct needs of rural areas. This can involve decentralizing decision making to local authorities who are more attuned to the specific challenges and opportunities within their communities [98]. Policies formulated at higher levels may not align with the specific needs as local communities are not involved in the decision-making process, especially in rural areas [117]. Development projects might not be in line with community needs and goals, which would result in low sustainability and ownership. This also results in implementation challenges arising when policies fail to address the unique socio-economic and cultural aspects of rural communities [118].

Across southern Africa, decentralized methods have become established in rural development [119]. Any development intervention presumed to require decentralization and the quantity of donor funding allocated to various decentralization projects are an indicator of the concept's popularity. The process of decentralization involves the transfer of power and authority from the state or federal government to local, non-governmental, and private entities [120]. People living in poverty in rural areas can:

- (a) Participate in decision making that impacts their daily lives;
- (b) Assess the outcomes of their own decisions;
- (c) Reduce the likelihood of misinformation;
- (d) Recognize the challenges and complexities involved in planning, managing, and administering;
- (e) Take accountability for your mistakes; and
- (f) Establish a sense of commitment to and membership of civil society [121].

Government agencies, non-governmental organizations (NGOs), and other stakeholders should foster active participation and collaboration with local communities in decision-making processes, raising an awareness of ownership by villages and the administration, strengthening the ability of villagers to recognize problems and to formulate and implement plans and increased work specialization with the central government acting as the policy formulation/coordination body and local governments and other organizations acting as implementation bodies as a result of the progress of decentralization programs [122].

Participatory evaluation methods involving local stakeholders can provide valuable insights and ensure that development efforts are responsive to community needs and priorities. The successful implementation of integrated rural development initiatives hinges on active participation and ownership from local communities [123]. By involving community members in the planning, implementation, and evaluation stages ensures that development initiatives are culturally sensitive, socially inclusive, and address the unique needs of rural residents. This approach fosters a sense of ownership, fosters social

cohesion, and increases the likelihood of sustainable outcomes [124]. Rural communities are diverse, with varying needs, priorities, and contexts. Recognizing this variability, effective integrated development initiatives prioritize locally appropriate solutions that are suited to the particular challenges and opportunities that each community presents [117].

To ensure total member involvement, individuals must be encouraged to implement their respective projects. Accordingly, it is important to start with an activity of which the continuation has some advantages for people, even though this may be stating the obvious. At the commencement stage, it is better to adopt the top-down planning and implementation style, which can make people consider that “the project belongs to them” [125]. As a result, people will continue their activities, even after the end of the project, and the positive effects may influence other areas. With an agreed return distribution method for the participants, there is a strong likelihood that the participants will continue the same activity in the post-project period. At the same time, it is important to provide selective cooperation for an area (people) with a strong commitment to a project right from the beginning [112]. Continuous maintenance is likely to be conducted by people for which selective cooperation is provided in the case of projects, because people will develop a sense of ownership and regard a project as something that belongs to them rather than something that is imposed on them [126].

Forge partnerships with governmental agencies, non-profit organizations, and private sector entities to pool resources and expertise. Collaborative efforts enhance the impact of development projects and foster sustainable, multi-dimensional solutions. Collaborations between public and private sectors are seen as crucial for rural development [127]. These partnerships can bring in investments, expertise, and innovations to address infrastructure gaps, promote entrepreneurship, and create sustainable economic opportunities [127]. Prioritize training programs to build the skills of local stakeholders, including community members and project implementers. Enhanced local capacities contribute to the sustainability and long-term success of development initiatives [128]. In order to properly respond to the difficulties of rural development originating from the complicated entanglement of the private and public sectors, the differences between private and public activities must be taken into proper consideration while respecting the ideas of the people [129]. One of the tasks faced by efforts to develop rural areas in Africa is to improve the efficiency of aid projects. The reality of aid for Africa compared to that for Asia is that the results vis-à-vis the inputs are less favorable, presumably because of the harsh natural conditions, low standard of education, fragile administrative capability, and unstable domestic politics [119]. A long time is often required in Africa for positive results to emerge, which is possibly a reflection of the poor efficiency of aid projects [130]. As a result, the Netherlands, for example, is now concentrating its assistance for agriculture on areas that are suitable for farming due to a high annual rainfall level [131].

The debate on ownership is a debate within the context of the people's contribution to and the continuity of a project through participation [127]. It is crucial to distinguish between different backgrounds when discussing ownership. It is expected that ownership should ensure that the project fully responds to the requests, intentions, and abilities of people through their participation from the planning stage. A donor or aid organization plays the role of a facilitator, with local technologies and materials being fully utilized [132]. Meanwhile, when people view the question of ownership, what they want is the development of infrastructure and cash injections to improve their standard of living, regardless of whether the facilitator is the government or a donor [133]. People will make efforts to maximize their benefits. In this sense, ownership building is both a time-consuming as well as labor-intensive process and is not necessarily something about which people are enthusiastic. Careful attention must, therefore, be paid to this aspect and the ownership building of a program truly required by people should be attempted taking the opportunity to establish program continuity into consideration [134].

Participatory rural development led by the initiative of the people is required for ownership building. Even if there is no clear answer as to how to build ownership, cost-

sharing must be prioritized. A request for people to share the cost will facilitate a serious examination of the selection of needs and the sustainability of a project on the part of the people [135]. For example, one idea calls for a leading role by local residents (local community) who are the intended beneficiaries of development right from the beginning until the end, with the donor and the government of the recipient country only participating as facilitators [136]. In an extreme case, an external donor and the government of a recipient country may choose not to interfere, even if a development plan (project) selected by local residents is undesirable from their viewpoint [132]. Conversely, there is the alternative approach where an aid organization will not provide assistance if the planned activities are not in line with its own policy. In another case, it may be necessary for all development processes to be led by external bodies because of an emergency situation where there is no time to await a decision by beneficiaries [130].

Table 4 shows the survey that was conducted in the Buhera District in Zimbabwe. Field research involved interviewing participants and members of community projects involved using a structured questionnaire. The study was based on random sampling, and it was found that one of the crucial design principles in programs and projects is that local communities must play a key role in the identification of rural development activities being undertaken in by government and donor agencies [137]. It also shows that promoting stakeholder participation in rural development is critical for the success and sustainability of development initiatives [72]. Local governments and donor agencies also play pivotal roles in fostering this participation by creating an enabling environment. Through policy support, funding, capacity building, and inclusive strategies, they can ensure that development initiatives are effective, sustainable, and equitable [138].

Table 4. Issues perceived as promoting stakeholder participation.

Factors	Respondents
Government and Donor agencies' long-term commitment to working with communities in the rural areas	Donor agencies staff, Community members
Most donor agencies staff have knowledge and skills on participatory approaches	Donor agencies staff, Community members
Community perception that rural development interventions address their needs	Local government staff, Donor agencies staff
Appreciated benefits from project undertakings are shared within the community	Community members, Donor agencies staff
Direct benefits accrued from rural development interventions	Community members
Support from community and local government leaders	Local government staff, Donor agencies staff
The community see the changes taking place as a result of rural development initiatives being implemented	Local government staff, Donor agencies staff, Community members

Source: Chifamba, Ephraim (2013) [137].

5. Limitations

A systematic literature review (SLR) or literature review (LR) might not capture all the nuanced challenges due to their structured and rigorous inclusion criteria, potentially overlooking gray literature and localized studies that provide deeper insights. Published studies may primarily report successful cases, underrepresenting failures or challenges. Socio-economic factors vary significantly across regions and communities. SLRs or LRs may generalize the findings, missing out on specific local contexts that influence effectiveness. Limited availability of data on socio-economic factors in rural Sub-Saharan Africa can lead to gaps in the review. Education's impact on rural development is multifaceted and

may not be fully captured in studies included in the review. Integrating findings from diverse disciplines (education, economics, and sociology) pose a challenge for a cohesive review. Rural development contexts are dynamic and evolving, which may not be fully reflected in the static nature of the published literature. Literature reviews may not provide detailed insights into on-ground implementation challenges and the real-world feasibility of strategies. Policies change over time, and reviews may not capture the most recent developments or impacts of recent policy shifts. Variability in methods used to evaluate policy impacts can lead to inconsistent findings, complicating synthesis. Community participation is subjective and context-specific, making it difficult to generalize findings across different settings. Many studies may focus on short-term outcomes, missing the long-term effects of community involvement. The selection of studies can introduce bias, affecting the comprehensiveness and objectivity of the review. Conducting a thorough SLR or LR is resource-intensive, requiring significant time and expertise. There can be a lag between the implementation of interventions and the publication of studies evaluating them, leading to outdated findings.

6. Future Directions and Research Gaps

Rural development, a dynamic and evolving field, holds the key to fostering inclusive growth, reducing disparities, and enhancing the quality of life in rural areas. In the future, stakeholders, including researchers, must identify future directions and address the research gaps. This is imperative to make sure rural development efforts are informed, effective, and responsive to the evolving needs of rural communities.

It is recommended that the various governmental units, including localities, should prioritize the essence of round-table meetings for discourse regarding the relevant research in pushing the frontier of novel rural development, education, and management. Inviting the private sector to the table is essential to help lagging regions improve their economies. We need to ensure Internet service providers join broadband discussions and lenders join economic development discussions. To predict better future research needs, central and local government researchers ought to develop partnerships with outreach practitioners. This is because contacts in the field, or inside the beltway, could provide an early look at areas where they need on-the-ground problem-solving support. This process could ensure that the necessary analysis is ready for when policy questions arise.

According to UNESCO (2014), building and renovating schools, providing electricity, and ensuring access to learning materials can significantly improve educational outcomes in rural areas [139]. Akyeamong, Kwame (2022) suggests that implementing comprehensive training programs and providing incentives for teachers to work in rural areas can enhance the quality of education [140]. Ye et al. (2020) suggests that ICT integration can significantly improve learning outcomes and bridge educational gaps [141]. Atisa et al. (2021) advocate for decentralizing decision-making processes and empowering local governments to improve the responsiveness and accountability of development initiatives [142]. Transparency International (2019) emphasizes the need for strong anti-corruption measures and ensuring transparency in resource allocation to enhance the effectiveness of rural development programs [71]. Rural poverty remains a significant barrier to development. Ingutia et al. (2020) argues that economic constraints limit families' abilities to invest in education, health, and other essential services, perpetuating cycles of poverty [143]. Expanding access to microfinance and credit services can empower rural entrepreneurs and farmers. Islam, Md Saiful (2021) highlights the positive impact of microfinance on lifting rural populations out of poverty [144]. Climate change impacts, such as droughts and floods, disproportionately affect rural areas, disrupting agricultural activities and livelihoods. Melore et al. (2020) stress the importance of building climate resilience in rural development strategies [145].

The promotion of community-driven sustainable development models empowers residents in decision-making processes, resource management, and project implementation. There is limited research on the factors influencing the success of community-driven development approaches. Identifying key success factors, challenges, and best practices in

community-led initiatives is important. Community involvement ensures that development initiatives align with local needs and priorities. The promotion of inclusive financial services through fin-tech solutions to enhance access to credit, savings, and financial literacy in rural areas is necessary. Financial inclusion empowers rural communities, fostering economic independence and enabling entrepreneurship. There is insufficient knowledge about the impact of digital financial inclusion on economic empowerment and poverty reduction, and an inadequate exploration of trade-offs and synergies between ecosystem-based approaches and traditional development models is required. There is a need to evaluate the socio-economic outcomes of digital financial inclusion initiatives in diverse rural contexts and assess the environmental, social, and economic implications of ecosystem-based developments. Climate resilience is essential for sustaining rural economies and mitigating the adverse effects of environmental changes. There is a limited understanding of the effectiveness of climate-resilient interventions and barriers to their adoption in diverse rural settings. Therefore, it is important to investigate the impact of climate-resilient strategies on agricultural productivity and community resilience.

7. Conclusions

In conclusion, integrated rural development, education, and management offer a holistic approach to addressing the complex challenges faced by rural communities. By combining education and management principles with development initiatives, these approaches can empower rural populations, enhance livelihoods, and promote sustainable development. However, overcoming challenges and ensuring the effectiveness and sustainability of these initiatives require long-term commitment, collaboration, and continuous evaluations and adaptations.

The research in this field has significantly contributed to our understanding of effective development practices and provided valuable policy insights. However, addressing the limitations and exploring new research directions will be essential for overcoming existing challenges and enhancing the impact of integrated rural development (IRD) initiatives. Continued innovation, interdisciplinary collaboration, and a focus on scalability and sustainability will drive future advancements in integrated rural development.

Author Contributions: Conceptualization, Y.Y.; methodology, B.Z.; formal analysis, D.A. and B.Z.; investigation, K.A.A.-P. and B.Z.; resources, Y.Y.; writing—original draft preparation, Y.Y. and B.Z.; writing—review and editing, K.A.A.-P. All authors have read and agreed to the published version of the manuscript.

Funding: This research received no external funding.

Conflicts of Interest: The authors declare no conflict of interest.

References

1. United Nations. *The Sustainable Development Goals Report 2023*; United Nations: New York, NY, USA, 2023.
2. Miele, M.; Cloke, P.; Marsden, T.; Mooney, P. *Handbook of Rural Studies*; Sage: London, UK, 2006.
3. Brenner, N.; Schmid, C.J.C. Towards a new epistemology of the urban? *City* **2015**, *19*, 151–182. [CrossRef]
4. Downs, A. *A Review of "Triumph of the City: How Our Greatest Invention Makes Us Richer, Smarter, Greener, Healthier and Happier"* Edward Glaeser; Penguin Press: New York, NY, USA; Taylor & Francis: Abingdon, UK, 2011; 352p.
5. United Nations. Key Differences Between Rural and Urban Areas. In *World Urbanization Prospects*; 2018 Revision; United Nations: New York, NY, USA, 2018.
6. Bureau, U.S.C. Urban Area Criteria for the 2020 Census—Final Criteria. 2023. Available online: <https://www.federalregister.gov/documents/2022/03/24/2022-06180/urban-area-criteria-for-the-2020-census-final-criteria> (accessed on 24 July 2024).
7. Anriquez, G.; Stamoulis, K.G. Rural Development and Poverty Reduction: Is Agriculture Still Key? *Electron. J. Agric. Dev. Econ.* **2007**, *4*, 5–46.
8. Harrison, G. *The World Bank and Africa: The Construction of Governance States*; Routledge: Informa, UK, 2004; Volume 13.
9. Ashley, C.; Maxwell, S. Rethinking rural development. *Dev. Policy Rev.* **2001**, *19*, 395–425. [CrossRef]
10. Stiglitz, J.E. Towards a new paradigm for development: Strategies, policies and processes. *Int. Econ. Rev.* **2002**, *16*, 9–37.
11. Heifetz, I.; Jaffe, P.G. Exploring the Impact of Industrialization on Social Mobility in Rural Communities: Towards Inclusive and Sustainable Economic Transformation. *Law Econ.* **2023**, *17*, 218–236. [CrossRef]

12. Rachele, R. A long-term vision for the EU's rural areas. *J. Eur. Rural. Dev.* **2022**, *28*, 15–34.
13. Gülümser, A.A. Rural Areas as Promising Hot Spots: Sustainable Rural Development Scenarios. Ph.D. Thesis, Istanbul Technical University, Istanbul, Turkey, 2009.
14. Seretse, M.; Chukwuere, J.; Lubbe, S.; Klopper, R.J.A.J. Problems around accessing information in rural communities. *Altern. J.* **2018**, *25*, 214–244. [[CrossRef](#)]
15. Olurinola, I.O.; Fadayomi, T.O.; Amoo, E.O.; Ola-David, O. Internal Migration and Welfare of Street Traders in the Urban Informal Economy of Nigeria. Ph.D. Thesis, Covenant University, Ojokoro, Nigeria, 2014.
16. Trends, G. *Challenges and Opportunities in the Implementation of the Sustainable Development Goals*; United Nations Development Programme & United Nations Research Institute for Social Development: Basel, Switzerland, 2017.
17. Powe, H.L.M. *Building Resilient Rural Places: Strategies from Local Leaders to Strengthen Rural Assets, Diversity, and Dynamism*; Brookings: Washington, DC, USA, 2020.
18. Parker, A.N. *Decentralization: The Way Forward for Rural Development?* World Bank Publications: Washington, DC, USA, 1995; Volume 1475.
19. Bardhan, P.; Mookherjee, D. *Decentralization and Local Governance in Developing Countries: A Comparative Perspective*; MIT Press: Cambridge, MA, USA, 2006.
20. Natarajan, N.; Newsham, A.; Rigg, J.; Suhardiman, D. A sustainable livelihoods framework for the 21st century. *World Dev.* **2022**, *155*, 105898. [[CrossRef](#)]
21. Kabonga, I. Reflections on the 'Zimbabwean crisis 2000–2008' and the survival strategies: The sustainable livelihoods framework (SLF) analysis. *Afr. Rev.* **2020**, *12*, 192–212. [[CrossRef](#)]
22. Chautala, A.; Okiyama, M.; Tokunaga, S. Evaluation of Effectiveness of Integrated Rural Development Programs in Malawi. *Reg. Stud.* **2022**, *52*, 1–20. [[CrossRef](#)]
23. Gautam, M.K. Rural Development in Nepal: A Historical Perspective. *Interdiscip. J. Manag. Soc. Sci.* **2020**, *1*, 66–79. [[CrossRef](#)]
24. Maulani, G.; Rahardja, U.; Hardini, M.; Izzaty, R.D.; Aini, Q.; Santoso, N.P.L. Educating farmers using participatory rural appraisal construct. In Proceedings of the 2020 Fifth International Conference on Informatics and Computing (ICIC), Gorontalo, Indonesia, 3–4 November 2020; pp. 1–8.
25. Fischer, K. Using participatory rural appraisal to research livelihoods. In *The Routledge Handbook on Livelihoods in the Global South*; Routledge: Informa, UK, 2022; pp. 124–133.
26. Castro-Arce, K.; Vanclay, F. Transformative social innovation for sustainable rural development: An analytical framework to assist community-based initiatives. *J. Rural. Stud.* **2020**, *74*, 45–54. [[CrossRef](#)]
27. Goldin, C. Human capital. In *Handbook of Cliometrics*; Springer International Publishing: Cham, Switzerland, 2024; pp. 353–383.
28. Liu, Y.; Zang, Y.; Yang, Y. China's rural revitalization and development: Theory, technology and management. *J. Geogr. Sci.* **2020**, *30*, 1923–1942. [[CrossRef](#)]
29. Chambers, R. Participatory rural appraisal (PRA): Analysis of experience. *World Dev.* **1994**, *22*, 1253–1268. [[CrossRef](#)]
30. Walker, M. Amartya Sen's capability approach and education. *Educ. Action Res.* **2005**, *13*, 103–110. [[CrossRef](#)]
31. Long, N. An actor-oriented approach to development intervention. In Proceedings of the Rural life improvement in Asia. Report of an APO Seminar on Rural Life Improvement for Community Development, Tokyo, Japan, 22–26 April 2002.
32. Cleaver, F. *Development through Bricolage: Rethinking Institutions for Natural Resource Management*; Routledge: Informa, UK, 2017.
33. Escobar, A. 'Post-development' as concept and social practice. In *Exploring Post-Development*; Routledge: Informa, UK, 2007; pp. 18–31.
34. Van der Ploeg, J.D. *The New Peasantries: Struggles for Autonomy and Sustainability in an Era of Empire and Globalization*; Routledge: Informa, UK, 2012.
35. Lipton, M. Urban bias: Of consequences, classes and causality. In *Beyond Urban Bias*; Routledge: Informa, UK, 2014; pp. 229–258.
36. United Nations. *World Social Report 2021: Reconsidering Rural Development*; United Nations: New York, NY, USA, 2021.
37. Aslam, M. Rural Development Experiences: An Asian Perspective. *J. Rural. Dev.* **2004**, *37*, 49–56.
38. Binswanger-Mkhize, H.; McCalla, A.F. The changing context and prospects for agricultural and rural development in Africa. *Handb. Agric. Econ.* **2010**, *4*, 3571–3712.
39. Nemes, G. *Integrated Rural Development-The Concept and Its Operation*; IEHAS Discussion Papers; Hungarian Academy of Sciences, Institute of Economics: Budapest, Hungary, 2005; pp. 170–180.
40. Baldock, D.; Dwyer, J.; Lowe, P.; Petersen, J.E.; Ward, N. *The Nature of Rural Development: Towards a Sustainable Integrated Rural policy in Europe*; Synthesis Report; Oxford University Press: Oxford, UK, 2001.
41. Chambers, R.; Conway, G. *Sustainable Rural Livelihoods: Practical Concepts for the 21st Century*; Institute of Development Studies (UK): Brighton, UK, 1992.
42. Scoones, I. Livelihoods perspectives and rural development. In *Critical Perspectives in Rural Development Studies*; Routledge: Informa, UK, 2013; pp. 159–184.
43. McAraeve, R. *Rural Development Theory and Practice*; Routledge: Informa, UK, 2009.
44. Häusermann, J. The realisation and implementation of economic, social and cultural rights. In *Economic, Social and Cultural Rights: Progress and Achievement*; Springer: Berlin/Heidelberg, Germany, 1992; pp. 47–73.
45. Adima, A. Exposed inequalities. Emancipation and constraint in the experiences of Kenyan women students abroad (1950s–1960s). *Diasporas. Circ. Migr. Hist.* **2021**, *37*, 61–77.

46. Ellis, F.; Biggs, S. Evolving themes in rural development 1950s–2000s. *Dev. Policy Rev.* **2001**, *19*, 437–448. [[CrossRef](#)]
47. Brundtland, G.H. *Opening Address by Gro Harlem Brundtland... on the Occasion of the Launch of the Report "Our Common Future"*, London, UK, 27 April 1987; World Commission on Environment and Development: London, UK, 1987.
48. Cohen, J.M.; Uphoff, N.T. Participation's place in rural development: Seeking clarity through specificity. *World Dev.* **1980**, *8*, 213–235. [[CrossRef](#)]
49. Cheruiyot, J.K. *Participatory Livelihood Analysis as an Alternative Method for Agricultural Extension Needs Assessment: Case of a Rural Community in Kenya*; University of Kabianga Repository: Kericho, Kenya, 2020.
50. Ohiare, S. A Much Needed Original Fresh Contribution to Both the Sustainability Transactions and Energy Studies Communities. Extensive in Its Coverage, and Impressive in Its Scope, This Book Offers an Insight and Comprehensive Analysis of Nigeria. *J. Energy Sustain. Stud.* **2023**, *12*, 101–125.
51. Redding, G. Societal knowledge quality as catalyst for the competitive productivity of technology: One in a set of several universal processes in trajectories of societal progress. *Int. Bus. Rev.* **2023**, *32*, 102096. [[CrossRef](#)]
52. Ahmad, M.I.S.; Idrus, M.I.; Rijal, S. The role of education in fostering entrepreneurial spirit in the young generation. *J. Contemp. Adm. Manag.* **2023**, *1*, 93–100.
53. Borase, S.J.P. Exploring the role of teaching training and development. *EPRA Int. J. Res. Dev.* **2023**, *8*, 119–122.
54. Gallie, D.; Paugam, S.; Jacobs, S. Unemployment, poverty and social isolation: Is there a vicious circle of social exclusion? *Eur. Soc.* **2003**, *5*, 1–32. [[CrossRef](#)]
55. Engle, P.L.; Black, M.M. The effect of poverty on child development and educational outcomes. *Ann. N. Y. Acad. Sci.* **2008**, *1136*, 243–256. [[CrossRef](#)]
56. Guajardo, M.; Guajardo, F.; del Carmen Casaperalta, E. Transformative education: Chronicling a pedagogy for social change. *Anthropol. Educ. Q.* **2008**, *39*, 3–22. [[CrossRef](#)]
57. Frenk, J.; Chen, L.; Bhutta, Z.A.; Cohen, J.; Crisp, N.; Evans, T.; Fineberg, H.; Garcia, P.; Ke, Y.; Kelley, P. Health professionals for a new century: Transforming education to strengthen health systems in an interdependent world. *Lancet* **2010**, *376*, 1923–1958. [[CrossRef](#)]
58. Crul, M. Is Education the Pathway to Success? A Comparison of Second Generation Turkish Professionals in Sweden, France, Germany and The Netherlands. *Eur. J. Educ.* **2015**, *50*, 325–339. [[CrossRef](#)]
59. Wellbrock, W.; Roep, D.; Wiskerke, J. An integrated perspective on rural regional learning. *Eur. Countrys.* **2012**, *4*, 1–16. [[CrossRef](#)]
60. Sharma, M.K.; Sharma, R. Innovation framework for excellence in higher education institutions. *Glob. J. Flex. Syst. Manag.* **2021**, *22*, 141–155. [[CrossRef](#)]
61. Tsitey, R. Investigating the Experience of Ruralness and Rural Education: A Phenomenological Study of Perceived Impacts on Achievements and Future Prospects in Rural Ghana. Ph.D. Thesis, Liberty University, Lynchburg, VA, USA, 2022.
62. Chakanika, W.; Sichula, K.; Sumbwa, I.; Nduna, M. The challenges of rural education in Africa. *S. Afr. Rural. Educ.* **2012**, *2*, 6–17.
63. OECD. *An OECD Learning Framework 2030*; Springer: Berlin/Heidelberg, Germany, 2019.
64. Yasunaga, M. *Non-Formal Education as a Means to Meet Learning Needs of Out-of-School Children and Adolescents*; UNESCO Institute for Statistics: Montreal, QC, Canada, 2014.
65. Galal, S. Poor children not attending school in Africa in 2020, by country. *Afr. J. Educ. Dev. Stud.* **2020**, *14*, 45–60.
66. Monk, D.H. Recruiting and retaining high-quality teachers in rural areas. In *The Future of Children*; Princeton University: Princeton, NJ, USA, 2007; pp. 155–174.
67. Kakupa, P.; Tembo, P.; Daka, H. Linking teacher effectiveness to school performance: Evidence from rural day secondary schools in the western province of Zambia. *Int. J. Educ. Dev.* **2015**, *40*, 100–112.
68. Mulkeen, A. *Teachers for Rural Schools: A Challenge for Africa*; FAO: Rome, Italy, 2005.
69. Dembélé, M.; Oviawe, J. Introduction: Quality education in Africa: International commitments, local challenges and responses. In *International Review of Education/Internationale Zeitschrift für Erziehungswissenschaft/Revue Internationale de l'Éducation*; Springer: Berlin/Heidelberg, Germany, 2007; pp. 473–483.
70. Holmes, D.A.K. The Role of Agricultural Colleges and Universities in Rural Development and Lifelong Learning in Asia. *Asian J. Agric. Dev.* **2019**, *2*, 137–178.
71. Union, A. *Corruption Perceptions Index 2018*; Transparency International: Berlin, Germany, 2019.
72. Zeho, F.H.; Prabowo, A.; Estiningtyas, R.A.; Mahadiansar, M.; Sentanu, I.G.E.P.S. Stakeholder collaboration to support accountability in village fund management and rural development. *J. Socioecon. Dev.* **2020**, *3*, 89–100.
73. Heshmati, A.; Bersisa, M. Poverty in Africa. In *Research Handbook on Measuring Poverty and Deprivation*; Edward Elgar Publishing: Cheltenham, UK, 2023; pp. 722–732.
74. Trudell, B. Local community perspectives and language of education in sub-Saharan African communities. *Int. J. Educ. Dev.* **2007**, *27*, 552–563. [[CrossRef](#)]
75. Ndamba, G.T. A Critical Review of Policy on Language-in-Education for Africa: A Case of Zimbabwe. Ph.D. Thesis, University of South Africa, Mbombela, South Africa, 2013.
76. Hlalele, D. Social justice and rural education in South Africa. *Perspect. Educ.* **2012**, *30*, 111–118.
77. Peters, S. Education and disability in cross-cultural perspective: The United States. In *Education and Disability in Cross-Cultural Perspective*; Routledge: Informa, UK, 2013; pp. 259–292.

78. Mestry, R.; Govindasamy, V. The perceptions of school management teams and teachers of the principal's instructional leadership role in managing curriculum changes. *Interchange* **2021**, *52*, 545–560. [[CrossRef](#)]
79. Corbett, M. Re-placing rural education: AERA special interest group on rural education career achievement award lecture. *J. Res. Rural. Educ.* **2021**, *37*, 1–14.
80. Plaatjie, S.R. Rural Development and the Search for an African Development Paradigm. In *African Perspectives on Reshaping Rural Development*; IGI Global: Hershey, PA, USA, 2020; pp. 1–18.
81. Fisher, M.; Gibbs, R.; Cromartie, J. Education's effect on poverty: The role of migration. *Rev. Agric. Econ.* **2007**, *29*, 437–445.
82. Liu, W.; Li, J.; Zhao, R. The effects of rural education on poverty in China: A spatial econometric perspective. *J. Asia Pac. Econ.* **2023**, *28*, 176–198. [[CrossRef](#)]
83. Brown, P.H.; Park, A. Education and poverty in rural China. *Econ. Educ. Rev.* **2002**, *21*, 523–541. [[CrossRef](#)]
84. Vermunt, D.A.; Verweij, P.A.; Verburg, R.W. What hampers implementation of integrated landscape approaches in rural landscapes? *Curr. Landsc. Ecol. Rep.* **2020**, *5*, 99–115. [[CrossRef](#)]
85. Baker, P.M.; Ward, A.C. Bridging temporal and spatial "gaps": The role of information and communication technologies in defining communities. *Inf. Commun. Soc.* **2002**, *5*, 207–224. [[CrossRef](#)]
86. Afshari, M.; Bakar, K.A.; Luan, W.S.; Samah, B.A.; Fooi, F.S. Factors affecting teachers' use of information and communication technology. *Int. J. Instr.* **2009**, *2*, 77–104.
87. Fox, W.F.; Porca, S. Investing in rural infrastructure. *Int. Reg. Sci. Rev.* **2001**, *24*, 103–133. [[CrossRef](#)]
88. Welland, A. *Electrification of Health Clinics in Rural Areas: Challenges and Opportunities*; CMEDT-Smart Villages Initiative, c/o Trinity College: Cambridge, UK, 2017.
89. Ndou, V. E-government for developing countries: Opportunities and challenges. *Electron. J. Inf. Syst. Dev. Ctries.* **2004**, *18*, 1–24. [[CrossRef](#)]
90. Rose, K.; Eldridge, S.; Chapin, L. The internet of things: An overview. *Internet Soc.* **2015**, *80*, 1–50.
91. Ndubuaku, M.; Okereafor, D. Internet of things for Africa: Challenges and opportunities. In Proceedings of the 2015 International Conference on Cyberspace Governance-Cyberabuja, Abuja, Nigeria, 4–7 November 2015; pp. 23–31.
92. Francks, P. *Technology and Agricultural Development in Pre-War Japan*; Yale University Press: New Haven, CT, USA, 1984.
93. Pigato, M. *Information and Communication Technology, Poverty, and Development in Sub-Saharan Africa and South Asia*; World Bank: Washington, DC, USA, 2001.
94. Adeya, C.N. *ICTs and Poverty: A Literature Review*; IDRC: Ottawa, ON, Canada, 2002.
95. Wei, J. Worldwide internet usages and online multi-linguistic population comparison study. *Inf. Syst. Educ. J.* **2004**, *2*, 24–25.
96. Seidametova, Z.; Temnenko, V. A global Internet-coverage. National Economic Systems in the Context of the Formation of the Global Economic Space. In Proceedings of the International Conference on Global Economics and Digital Transformation, Moscow, Russia, 10–12 July 2023.
97. Nyirenda-Jere, T.; Biru, T. Internet development and Internet governance in Africa. *Internet Soc.* **2015**, *5*, 1–44.
98. Bank, W. *Community-Driven Development in Africa: Experiences and Challenges*; The World Bank: Washington, DC, USA, 2020.
99. Ekpe, U.J. Sustainable Agriculture Education Programs in Uganda: Successes, Challenges, and Impact. *J. Agric. Educ. Ext.* **2024**, *23*, 289–305. [[CrossRef](#)]
100. Owiny, S.A. *Adult Education as a Strategy to Engage People-Centered Social Development in Uganda and Tanzania*; The Pennsylvania State University: University Park, PA, USA, 2017.
101. Patrinos, H.A.; Fasih, T. *Decentralized Decision-Making in Schools: The Theory and Evidence on School-Based Management*; World Bank Publications: Washington, DC, USA, 2009.
102. Alemayehu, M.; Teklewolde, T. Women Farmers' Participation in Participatory Agricultural Extension and Research: The Case of West Gojjam Zone, Amhara Regional State, Ethiopia. *Ethiop. Renaiss. J. Soc. Sci. Humanit.* **2021**, *8*, 125–145.
103. David, S.; Cobbah, E.A. From our perspective: Developing printed extension materials with cocoa farmers in Ghana. *Int. J. Agric. Sustain.* **2008**, *6*, 267–276. [[CrossRef](#)]
104. Kajembe, G.C.; Nduwamungu, J.; Luoga, E.J. Impact of community-based forest management and joint forest management on forest resource base and local peoples' livelihoods: Case studies from Tanzania. *For. Policy Econ.* **2005**, *64*, 2016.
105. Alufohai, G.O.; Ugolor, D.; Edemhanria, I.I. Beneficiaries' perception of the effect of Ifad-community based natural resource management programme on their livelihood in Edo State, Nigeria. *Niger. J. Rural. Sociol.* **2015**, *15*, 7–12.
106. Pretty, J.N. Participatory learning for sustainable agriculture. *World Dev.* **2020**, *23*, 1247–1263. [[CrossRef](#)]
107. Ibrahim, A. Community participation in rural development in nigeria: Problems and prospects. *Int. J. Soc. Sci. Humanit. Rev.* **2019**, *9*, 156–164.
108. Josè Moisés, D.; Kgabi, N.; Kunguma, O. Integrating "Top-Down" and "Community-Centric" Approaches for Community-Based Flood Early Warning Systems in Namibia. *Challenges* **2023**, *14*, 44. [[CrossRef](#)]
109. Phaduli, I. Indigenous Knowledge and Sustainable Development: The Case of Rwanda's Agricultural Sector. Master's Thesis, Graduate School of Business (GSB), Kabinga, Mundia, 2023.
110. Gebeyehu, H.Z.; Jira, Y.S. Exploring participatory communication implemented to improve the livelihood of rural Ethiopia. *Humanit. Soc. Sci. Commun.* **2023**, *10*, 802. [[CrossRef](#)]
111. Cabral, L. Decentralisation in Africa: Scope, motivations and impact on service delivery and poverty. *Future Agric. Consort.* **2011**, *20*, 1–14.

112. Paul, S. *Community Participation in Development Projects*; World Bank: Washington, DC, USA, 1987.
113. Zadawa, A.N.; Omran, A. Rural development in Africa: Challenges and opportunities. In *Sustaining our Environment for Better future: Challenges and Opportunities*; Springer: Berlin/Heidelberg, Germany, 2020; pp. 33–42.
114. Shucksmith, M. Future Directions in Rural Development? *J. Agric. Econ.* **2012**, *63*, 1–21.
115. Agrawal, A.; Gibson, C.C. Enchantment and disenchantment: The role of community in natural resource conservation. *World Dev.* **1999**, *27*, 629–649. [[CrossRef](#)]
116. OECD. *The New Rural Paradigm: Policies and Governance*; OECD: Paris, France, 2006.
117. Rude, H.; Miller, K.J. Policy challenges and opportunities for rural special education. *Rural. Spec. Educ. Q.* **2018**, *37*, 21–29. [[CrossRef](#)]
118. Betts, T.F.; Pitterman, S. Evolution and promotion of the Integrated Rural Development approach to refugee policy in Africa. *Afr. Today* **1984**, *31*, 7–24.
119. Van de Walle, N. *African Economies and the Politics of Permanent Crisis, 1979–1999*; Cambridge University Press: Cambridge, UK, 2001.
120. Ntsebeza, L. *Decentralisation and Natural Resource Management in Rural South Africa: Problems and Prospects*; Institute for Poverty Land and Agrarian Studies (PLAAS): Cape Town, South Africa, 2002.
121. Ahmad, M.S.; Abu Talib, N.B. Empowering local communities: Decentralization, empowerment and community driven development. *Qual. Quant.* **2015**, *49*, 827–838. [[CrossRef](#)]
122. ESCAP. *Guidelines for Rural Centre Planning*; FAO: Rome, Italy, 1979.
123. Dobbs, L.; Moore, C. Engaging communities in area-based regeneration: The role of participatory evaluation. *Policy Stud.* **2002**, *23*, 157–171. [[CrossRef](#)]
124. Cousins, J.B.; Earl, L.M. The case for participatory evaluation. *Educ. Eval. Policy Anal.* **1992**, *14*, 397–418. [[CrossRef](#)]
125. Oakley, P. *Projects with People: The Practice of Participation in Rural Development*; International Labour Organization: Geneva, Switzerland, 1991.
126. Parker, M.; Patton, K.; Madden, M.; Sinclair, C. From committee to community: The development and maintenance of a community of practice. *J. Teach. Phys. Educ.* **2010**, *29*, 337–357. [[CrossRef](#)]
127. Snaveley, K.; Tracy, M.B. Collaboration among rural nonprofit organizations. *Nonprofit Manag. Leadersh.* **2000**, *11*, 145–165.
128. Hacker, K.; Tendulkar, S.A.; Rideout, C.; Bhuiya, N.; Trinh-Shevrin, C.; Savage, C.P.; Grullon, M.; Strelnick, H.; Leung, C.; DiGirolamo, A. Community capacity building and sustainability: Outcomes of community-based participatory research. *Prog. Community Health Partnersh. Res. Educ. Action* **2012**, *6*, 349.
129. Stocklin-Weinberg, R.; Veiga, M.M.; Marshall, B.G. Training artisanal miners: A proposed framework with performance evaluation indicators. *Sci. Total Environ.* **2019**, *660*, 1533–1541. [[CrossRef](#)] [[PubMed](#)]
130. Bräutigam, D.A.; Knack, S. Foreign aid, institutions, and governance in sub-Saharan Africa. *Econ. Dev. Cult. Chang.* **2004**, *52*, 255–285. [[CrossRef](#)]
131. Smit, A.L.; Bindraban, P.S.; Schröder, J.; Conijn, J.; Van der Meer, H. *Phosphorus in Agriculture: Global Resources, Trends and Developments: Report to the Steering Committee Technology Assessment of the Ministry of Agriculture, Nature and Food Quality, The Netherlands, and in Collaboration with the Nutrient Flow Task Group (NFTG), Supported by DPRN (Development Policy Review Network)*; Plant Research International: Wageningen The Netherlands, 2009.
132. Knack, S.; Rahman, A. Donor fragmentation and bureaucratic quality in aid recipients. *J. Dev. Econ.* **2007**, *83*, 176–197. [[CrossRef](#)]
133. Fukuda-Parr, S.; Lopes, C. *Capacity for Development: New Solutions to Old Problems*; Routledge: Informa, UK, 2013.
134. Park, J.-D.; Park, J.-D. Assessing the role of foreign aid, donors and recipients. In *Re-Inventing Africa's Development: Linking Africa to the Korean Development Model*; Springer: Berlin/Heidelberg, Germany, 2019; pp. 37–60.
135. Narayan, D. *Participatory Rural Development. Agriculture and the Environment: Perspectives on Sustainable Rural Development*; World Bank Publications: Washington, DC, USA, 1998; pp. 139–162.
136. Green, M. Making development agents: Participation as boundary object in international development. In *The Government of Chronic Poverty*; Routledge: Informa, UK, 2013; pp. 102–125.
137. Chifamba, E. Confronting the challenges and barriers to community participation in rural development initiatives in Duhara district, ward 12 Zimbabwe. *Int. J. Curr. Res. Acad. Rev.* **2013**, *1*, 138–149.
138. Wang, Y.; Cao, H.; Yuan, Y.; Zhang, R. Empowerment through emotional connection and capacity building: Public participation through environmental non-governmental organizations. *Environ. Impact Assess. Rev.* **2020**, *80*, 106319. [[CrossRef](#)]
139. United Nations Educational, Scientific and Cultural Organization. Teaching and learning: Achieving quality for all. In *Education for All Global Monitoring Report*; UNESCO: Paris, France, 2014.
140. Akyeampong, K. Teaching at the bottom of the pyramid: Teacher education in poor and marginalized communities. In *Learning, Marginalization, and Improving the Quality of Education in Low-Income Countries*; Open Book Publisher: Cambridge, UK, 2022; pp. 77–111.
141. Ye, L.; Yang, H. From digital divide to social inclusion: A tale of mobile platform empowerment in rural areas. *Sustainability* **2020**, *12*, 2424. [[CrossRef](#)]
142. Atisa, G.; Zemrani, A.; Weiss, M. Decentralized governments: Local empowerment and sustainable development challenges in Africa. *Environ. Dev. Sustain.* **2021**, *23*, 3349–3367. [[CrossRef](#)]

143. Ingutia, R.; Reztis, A.N.; Sumelius, J. Child poverty, status of rural women and education in sub Saharan Africa. *Child. Youth Serv. Rev.* **2020**, *111*, 104869. [[CrossRef](#)]
144. Islam, M.S. Role of Islamic microfinance in women's empowerment: Evidence from rural development scheme of Islami bank Bangladesh limited. *ISRA Int. J. Islam. Financ.* **2021**, *13*, 26–45. [[CrossRef](#)]
145. Melore, T.W.; Nel, V. Resilience of informal settlements to climate change in the mountainous areas of Konso, Ethiopia and QwaQwa, South Africa. *Jambá J. Disaster Risk Stud.* **2020**, *12*, 1–9. [[CrossRef](#)]

Disclaimer/Publisher's Note: The statements, opinions and data contained in all publications are solely those of the individual author(s) and contributor(s) and not of MDPI and/or the editor(s). MDPI and/or the editor(s) disclaim responsibility for any injury to people or property resulting from any ideas, methods, instructions or products referred to in the content.