

Article

Driving Sustainable Growth for Small and Medium Enterprises in Emerging Urban–Rural Economies

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Abstract: Rural economies are crucial for global development, with more than 80% of the world's population living in rural areas and agriculture providing livelihoods for approximately 2.5 billion people worldwide. However, these economies are often vulnerable to various factors, including climate change, natural disasters, and a lack of progressive economic policies. The main aim of making rural economies more sustainable is to promote long-term economic development, protect the environment, and improve the quality of life in urban–rural communities. This paper explored certain strategies for enhancing rural economies to be more sustainable. The results show that smart growth has been rapidly growing in urban cities, while certain communities outside urban areas have been left behind. However, both urban and rural communities need economic growth and be adaptive to smart growth to serve their communities and adhere to the Sustainable Development Goals (SDGs) in the new era of innovation. Thus, we argue that rural areas are a big part of emerging economies. As such, they cannot be left behind in any smart growth. In this study, we found that rural economies need training and up-skilling in order to improve their sustainability and efficiency targets. Through a systematic review, this paper looked at various ways rural communities can solve their challenges toward smart growth and the sustainability of their resources. As a result, we propose solutions for urban–rural communities to implement in daily activities in terms of policy and practice approaches.

Keywords: SMEs; smart growth; innovation; rural communities; urbanization



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1. Introduction

Urbanizing rural economies refers to a development approach that seeks to bridge the economic gap between urban and rural areas by integrating rural communities into the larger urban economy [1,2]. Urbanizing rural economies aims not to urbanize rural areas physically but to improve the economic opportunities and living conditions in rural communities. This can be achieved by creating opportunities for economic growth and development in rural areas, thereby reducing poverty, improving living standards, and fostering sustainable development [2]. Since most rural economies depend on agriculture and allied activities, it is thus necessary to modernize agriculture. This can be achieved by upgrading agricultural practices, promoting mechanization, introducing advanced technologies, and supporting value-added agricultural products.

The current research topic exploring the dynamics of urbanizing rural economies and the potential benefits of sustainable agricultural practices for SMEs in respective countries holds immense significance for several reasons. Firstly, the rapid urbanization of rural areas has far-reaching implications for SMEs, often forming the backbone of local economies. Understanding the drivers and consequences of urbanization is crucial for policymakers, entrepreneurs, and stakeholders to formulate targeted strategies that support

SME growth and competitiveness in these evolving environments. Secondly, sustainable agricultural practices offer a promising avenue for SMEs to enhance their productivity while minimizing adverse environmental impacts [3]. Adopting eco-friendly agricultural techniques can lead to resource efficiency, reduced greenhouse gas emissions, and improved resilience to climate change, thereby contributing to the long-term sustainability of SMEs and their communities.

Furthermore, investigating the intersection of urbanizing rural economies and sustainable agriculture is pertinent to achieving the United Nations Sustainable Development Goals (SDGs). These goals encompass objectives related to poverty alleviation, food security, climate action, and responsible consumption and production [3]. By embracing sustainable agriculture, SMEs can play a pivotal role in contributing to these global development targets. Overall, this research topic holds the potential to guide policy formulation, inform business strategies, and foster inclusive and resilient economic development in Brazil, Russia, China, and South Africa (BRICS). By leveraging sustainable agriculture, SMEs can position themselves at the forefront of transformative and sustainable growth in urbanizing rural areas.

Agriculture has grown in recent years and has shown massive development worldwide [2,3]. Agriculture is one of the sectors that provides food, income, and jobs in many countries, especially developing countries. However, the sector has always encountered climate change or environmental challenges that affect the sector in many ways, such as price hikes or damage to the soil. Mahendra Dev [4] states that in India, the agricultural sector had approximately 121 million holdings in 2001 and 2001. The data were collected from the agriculture census, and 99 million were small and marginal farmers. Agriculture is an important sector that provides food for communities and provides income to those working there. In 2007–08, there was an increase in cereal prices in world markets, which made agriculture unstable for those two years [4]. Therefore, increasing awareness of the sector and seeing the challenges that the sector is facing will help minimize the effects that may come because there will be prevention aims. In both 1945 and 2017, there was a labor and land inputs decline, which made things very difficult for the agricultural sector because it affected labor with a 76% decrease, and land input decreased by 28%, while intermediate goods showed an increase in demand, such that they increased by 133% [5].

The data were collected from the agriculture census, and 99 million were small and marginal farmers. Dethier and Effenberger [6] talk about the disappearance of agriculture between 1960 and 1970. The sector was not showing growth because there were no donors who were showing interest in the sector, and there was not enough funding. Nevertheless, there is new interest in the sector, and G8 countries have committed to investing in agriculture with an amount of USD 22 billion to solve all the challenges faced by the sector [7].

This research aimed to investigate urbanizing rural economies globally and explore the potential benefits of sustainable agricultural practices for SMEs operating in different regions. The research objectives included examining urbanization drivers and characteristics, identifying key socio-economic trends and patterns, assessing the relevance and implications of sustainable agricultural practices for growth and development, analyzing potential challenges and barriers faced by SMEs in adopting sustainable practices, and developing strategic recommendations and policy guidelines for promoting sustainable agricultural practices among SMEs in the BRICS countries. The scope of this research includes case studies, statistical analyses, and policy evaluations, focusing on SMEs in various sectors, such as agriculture, agribusiness, manufacturing, and services. This study used a systematic review to obtain existing data collected via surveys, interviews, focus groups, government reports, academic literature, and international organizations. By addressing these research objectives and defining the scope, this study aims to contribute valuable insights and recommendations to policymakers, researchers, and stakeholders seeking sustainable and inclusive growth in urbanizing rural economies.

2. Challenges for Rural Economies

Scale and efficiency: Wiggins, Kirsten, and Llambí (2010) [5] state that other farms say the bigger the farm is, the more varieties can be harvested. However, this is currently a challenge for most rural and small farmers. A study conducted by Yotopoulos and Lau (1973) [8] revealed that a small farm in the Indian Punjab was more economically efficient compared with large farms. Many factors are involved in improving rural farmers and ensuring they are efficient. A general U trend was observed, which was confirmed when Khan and Maki (1979) [9] showed that large farms in Pakistan were economically efficient. Burja and Burja (2016) [10] mention another important challenge that farmers face: the level of education of rural farmers. They are not experienced in farming or educated in the field. As a farmer, it is important to also have experienced people in the field because there is a higher chance of efficiency, even if the farm is in a small rural area.

Poverty in rural areas: Poverty is one of the biggest challenges many farmers face, and large populations in rural areas rely on agriculture to survive daily. There has been development in the agricultural sector, and there has been much expectation that this will reduce poverty in communities and create employment opportunities. Victor Bekun and Akadiri [11] state that more than 70% of Southern Africa relies on agriculture for food and income generation. Agriculture also has a strong influence on economic growth and social stability. Machete [12] explains that agriculture is one of those sectors that cannot fail because this may negatively fuel poverty and affect the economy. Many rural citizens rely on the agricultural sector because it provides a minimum wage and a consistent income for some households. However, this does not mean it reduces poverty for the whole community. The challenge of being poorly paid in agriculture comes from unskilled workers.

Climate change/heavy rainfall: Heavy rain is the biggest challenge that rural farmers face because flooding and drought affect soil quality and food security. Fahad and Wang [13] explain that poverty increases because employees cannot go to work when there are floods or environmental changes in the country. A worsening food insecurity situation, heat stress, and declining soil capacity for agriculture could also be obstacles to poverty reduction efforts and sustainable development. Anabaraonye, Okafor [14] states that Nigeria witnessed a series of climate-change-related disasters and had many negative increases in health risk and agricultural production. Swaminathan and Kesavan [15] discuss agriculture as being one of the contributors and threats to climate change worldwide, with forestry and fisheries being impacted the most by climate change and contributing to emissions. In the era of greenhouse gas emissions, forestry and agriculture also play a huge role and contribute approximately 13.5%. One cannot avoid climate change because it is the biggest challenge farmers face and needs an urgent solution.

Rural developing countries are the countries that are most sensitive to climate change, such as flooding, and have a lot of economic and social risk for many individuals. This causes low adaptive capacities with low resources. Kreft and Eckstein [16] state that if one looks at Pakistan and how their farmers have struggled, they are being affected by the increase in climate change.

Low commodity prices: Creating opportunities for rural farmers to have a chance to raise incomes and be involved in the growing markets for high-value agricultural commodities is vital, because rural farmers cannot reach markets or have access to market due to barriers such as transport, access and awareness. Magesa, Michael [17] discusses the 80% of Tanzanians who depend on the agricultural sector. Many of these farmers can build good relationships with their sellers and bargain for better prices if they have access to markets. This also affects their production process and their pricing as displayed on Figure 1 sharply increasing over the years. This can also cause a lack of important information, which can be useful to rural farmers [18].

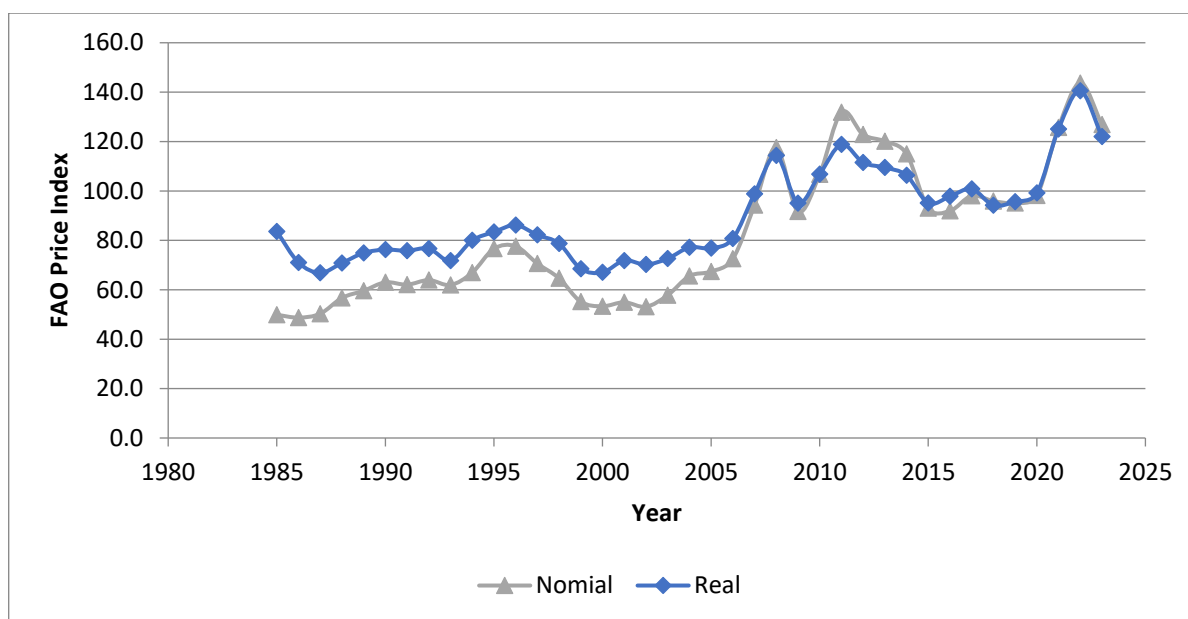


Figure 1. Graph showing FAO Price Index from 1985 to 2023 [19].

Labor in agriculture: This is the biggest factor for small rural farmers who do not have enough resources and do not have money to invest in the required labor for the agricultural sector to grow. When small farmers are expected to grow and produce more profit, this becomes a challenge because they are measured by the average value added per worker in the sector.

Trade barriers: There is a huge need for developed countries to reduce trade barriers to assist low-income farmers and developing countries. Negotiation needs to happen first and meet other small farmers halfway so they can produce. Then, they need to stabilize prices as well and agree on some guarantee of food security. In this way, rural farmers can stay sustainable [20].

Other challenges: Not being able to increase productivity and production in developing countries is a challenge because to produce more, farmers need proper machines that will help with productivity, and if there are no sponsors for the rural farmers, this becomes very challenging. This challenge can be resolved, but several issues need to be addressed first by the rural farmers, such as fertilizer, storage, and rural infrastructure.

3. Research Methodology

Following a qualitative research approach, this study utilized a systematic review technique to obtain existing data collected via surveys, interviews, focus groups, government reports, academic literature, and international organizations to analyze the identified research problem. To address this research problem, we set research objectives that allowed for a clear definition of the scope of this study and aimed to contribute valuable insights and recommendations to policymakers, researchers, and stakeholders seeking sustainable and inclusive growth in urbanizing rural economies.

4. Agricultural Innovation System

One of the solutions that rural farmers can adopt to make sure that they are solving challenges is implementing an agricultural innovation system (AIS) because it brings in several organizations to work together, and this is a chance for rural farmers to share their challenges with those who can assist and give them advice on how to stay sustainable. An AIS brings in an organization that deals with technologies and has managers who know how to manage rural and small farmers. They are able to give guidance and education

because those are the fundamental skills needed so that rural farmers can adapt to the new technological era [21]. The agricultural innovation system framework is shown in Figure 2.

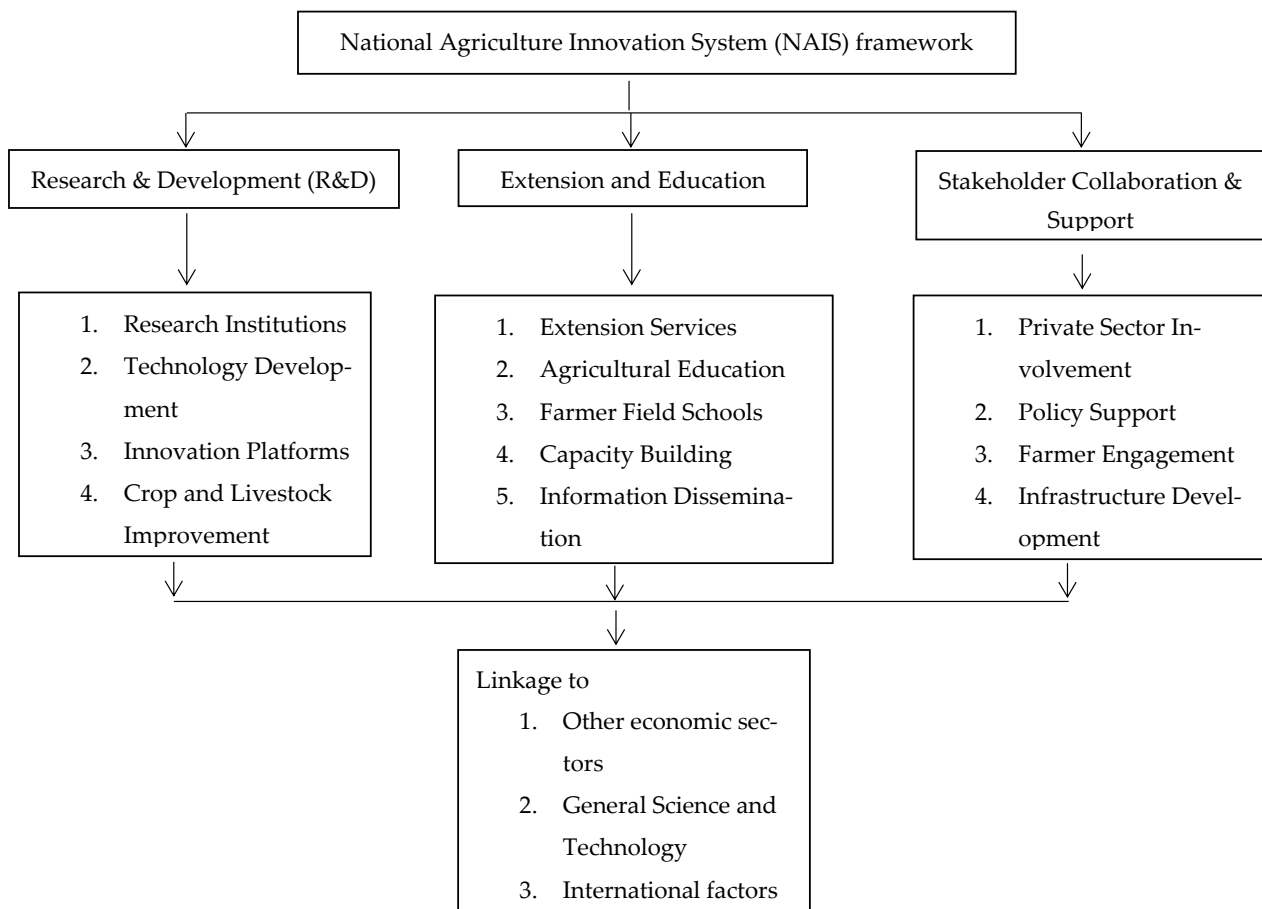


Figure 2. Agricultural innovation system framework [22].

They also have an international research institute that can help resolve some of the challenges for small farmers. Having NGOs for farmers also assists because they are there to ensure such challenges are considered. Farmers and consumer organizations will help.

An AIS is important for small farmers. It helps assist with knowledge exchange regarding technological changes that occur. It will deliver innovation that is relevant to those particular rural farmers.

Green Revolution

Adapting to the green revolution will help rural farmers with faster labor and land productivity, which will help with unemployment. It can lower domestic prices and increase growth in food production [20].

5. Strategies for Urbanizing Rural Economies

Small and medium enterprises (SMEs) are pivotal in urbanizing rural economies by driving economic growth, generating employment, and fostering local development. However, SMEs must embrace strategic smart growth initiatives to harness their full potential. This multifaceted approach entails leveraging innovative technologies, accessing new markets, developing sustainable practices, and nurturing a skilled workforce. By embracing such strategies, SMEs can navigate the challenges posed by urbanization, capitalize on emerging opportunities, and significantly contribute to transforming rural economies [21].

A. Promoting Sustainable Agriculture

Agriculture is the backbone of most rural economies, and it is critical to promote sustainable agricultural practices that protect the environment while increasing productivity. Sustainable agriculture involves farming practices that minimize negative environmental impacts, promote biodiversity, and ensure long-term food security [23]. This can be achieved through several measures, including the following

- i. **Crop rotation:** Crop rotation is a farming technique that involves rotating different crops in a particular field over time. This technique helps to improve soil fertility and reduce the need for synthetic fertilizers and pesticides. According to a study by the Food and Agriculture Organization (FAO), crop rotation can increase crop yields by up to 15% while reducing synthetic fertilizers and pesticides [24].
- ii. **Conservation agriculture:** Conservation agriculture is a farming technique that involves minimum tillage, permanent soil cover, and crop rotation. This technique helps to improve soil quality, conserve water, and reduce greenhouse gas emissions. According to a study by the FAO, conservation agriculture can reduce soil erosion by up to 90% and increase crop yields by up to 30% [25].

B. Investing in Renewable Energy

Investing in renewable energy is critical to making rural economies more sustainable. Renewable energy sources such as solar, wind, and hydropower can provide reliable and affordable energy to rural communities while reducing dependence on fossil fuels. According to the International Renewable Energy Agency (IRENA), renewable energy can help create jobs, reduce energy poverty, and improve energy security in rural areas [26,27]. Some specific measures for promoting renewable energy in rural economies include the following:

- i. **Off-grid solar power:** Off-grid solar power can provide reliable and affordable energy to rural communities not connected to the national grid. According to the World Bank, off-grid solar power can help to reduce energy poverty and improve the quality of life for rural communities. Recently, the government of Karnataka, a state in India, allotted 314 MW of solar energy projects to land-owning farmers with a minimum capacity of 1 MW and a maximum capacity of 3 MW for the sale of energy [28,29].
- ii. **Microhydropower:** Microhydropower involves generating electricity from small-scale hydroelectric systems. This technology can provide reliable and affordable energy to rural communities in areas with rivers and streams. According to the International Centre for Integrated Mountain Development (ICIMOD), microhydropower can help to reduce dependence on fossil fuels and improve energy security in rural areas. A recent project by the World Bank in collaboration with the Government of Afghanistan showed microhydroelectric dams, which generate 30 K.W. of electricity, providing power to all 88 families of the surrounding villages throughout the year [28,30].

C. Promoting Rural Tourism

Rural tourism is an excellent opportunity to promote economic development in rural areas while preserving the environment and cultural heritage. Rural tourism involves attracting visitors to rural areas to experience the local culture, food, and natural beauty. According to the World Tourism Organization (UNWTO), rural tourism can help to create jobs, promote entrepreneurship, and enhance rural communities' quality of life [31]. Some specific measures for promoting rural tourism in rural economies include the following:

- i. **Developing ecotourism:** Ecotourism involves promoting tourism that is environmentally friendly and sustainable. This can include activities such as hiking, bird watching, and nature conservation. According to the UNWTO, ecotourism can help promote sustainable tourism practices while preserving the environment and local culture. One example is the USD 19.00 million

Sustainable Tourism Project sanctioned by the Asian Development Bank in Mongolia to achieve environmentally sustainable and inclusive economic growth [32].

- ii. Developing agrotourism: Agrotourism involves promoting tourism that focuses on agriculture and rural life. This can include visiting farms, participating in agricultural activities, and experiencing the local food and culture. According to the UNWTO, agrotourism can help promote rural development, create jobs, and enhance the economy. Kothari (2021) affirms that setting up agrotourism activities can revitalize local communities for farmers and rural populations [29].

D. Community Development through Cooperatives and Self-Help Groups

Cooperatives and self-help groups (SHGs) effectively promote community development in rural areas. These groups can help empower rural communities by providing access to credit, promoting entrepreneurship, and improving market access. According to the International Cooperative Alliance (ICA), cooperatives can help create jobs, reduce poverty, and improve the quality of life for rural communities. Some specific measures for promoting community development through cooperatives and SHGs include the following:

- i. Promoting rural entrepreneurship: Cooperatives and SHGs can help promote rural entrepreneurship by providing access to credit, training, and market linkages. This can help create new businesses, generate employment, and promote economic growth in rural areas. According to a study by the ICA, cooperatives can create up to 250 million jobs worldwide. There is evidence that entrepreneurship and small businesses can become an important economic engine in these communities, despite data suggesting that rural areas frequently have limited access to financial and technological resources [33].
- ii. Promoting gender equality: Cooperatives and SHGs can help to promote gender equality by empowering women and girls in rural communities. Women are often underrepresented in formal employment and face various forms of discrimination. Cooperatives and SHGs can provide women with access to credit, training, and leadership opportunities, helping to promote their economic and social empowerment. According to a study by the United Nations, promoting gender equality can help reduce poverty and promote economic growth in rural areas. Neha Kumar (2021) studied 1470 rural women from five Indian states and showed that self-help groups help empower women and close the intra-household empowerment gap [34].
- iii. Improving market access: Cooperatives and SHGs can help to improve market access for rural communities by pooling resources, negotiating better prices, and accessing new markets. This can help to increase incomes and promote economic growth in rural areas. According to a study by the ICA, cooperatives can help to reduce poverty by up to 30%. Urban periodic markets (UPMs) are one such way to generate socioeconomic interactions and enable cooperative marketing in both regions. A study by Godfred Addai (2023) confirms the same in Ghana.

E. Agripreneurship

Agripreneurship refers to entrepreneurial ventures in agriculture, combining innovative practices with business acumen [13]. Agripreneurs drive sustainable farming methods, tech advancements, and value-added products, fostering food security and rural development. By bridging agriculture and entrepreneurship, they play a crucial role in shaping the future of farming and ensuring a resilient food system. The market potential of agritech startups was estimated to be USD 24.1 Bn in India, with over 1000+ agritech startups established as of 2020 [35].

F. Regulatory and Bureaucratic Hurdles

Regulatory and bureaucratic hurdles are common obstacles that small and medium enterprises (SMEs) face when starting or running their businesses. These challenges can significantly impede SMEs' growth and hinder their ability to compete in the market. To address these issues, various measures can be taken:

- i. **Simplification and streamlining:** Simplifying and streamlining regulatory processes is crucial to reducing the burden on SMEs. Governments can work toward consolidating multiple permits and licenses into a single application, eliminating redundant requirements, and adopting standardized forms and procedures. This would save time and resources for SME owners, enabling them to focus more on business operations and growth. Neha Shroff (2020) showed that improving parameters like ease of business can attract more FDI, ensuring financial access for SMEs' growth [36].
 - ii. **Digitalization of services:** Embracing digital solutions can revolutionize how SMEs interact with government agencies. Establishing online portals for business registration, tax filing, and other regulatory compliance tasks can make the process more efficient and transparent. Digitalization also allows for real-time tracking and updates, reducing delays and inefficiencies associated with paperwork. Another study by Arnesh Telukdarie (2023) shows that developing integrated systems in various fields allows small firms to access digital technologies [37].
- G. **Technology:** Technology is another factor that challenges rural farmers and stands in the way of growth that may depend on a new technology system, such as cellphone banking and accessing information easily and quickly with a good internet connection. Dlodlo and Kalezhi [38] state that when rural farmers have access to the internet and mobile phones, many of their challenges may be quickly solved, like the time used to travel to the bank, and transport is another challenge they face. It would be easier for them to perform many transfers amongst each other for effectiveness. Technology and innovation are highly important for rural farmers, so being able to overcome these two issues as their biggest challenges can assist farms to (1) gain low-cost and pervasive connectivity, (2) be adaptable and have affordable tools to communicate or perform tasks, and (3) have innovative business models.
- H. **Talent and skill development:** Addressing skills and talent shortages is critical for the growth and sustainability of small and medium enterprises (SMEs). To overcome these challenges, several strategies can be employed:
- i. **Workforce development programs:** Governments and organizations can establish workforce development programs that provide specialized training and skills development tailored to the needs of SMEs. These programs can focus on areas such as technical skills, digital literacy, and industry-specific knowledge, enhancing the employability of individuals and creating a pool of skilled talent for SMEs [39].
 - ii. **Partnerships with educational institutions:** Collaborating with schools, colleges, and vocational training centers allows SMEs to actively engage in curriculum design and ensure that graduates are equipped with relevant skills [39]. Internship and apprenticeship programs can also be established to bridge the gap between education and practical job requirements.

An overview of supportive and sustainable agriculture solutions is shown in Figure 3.

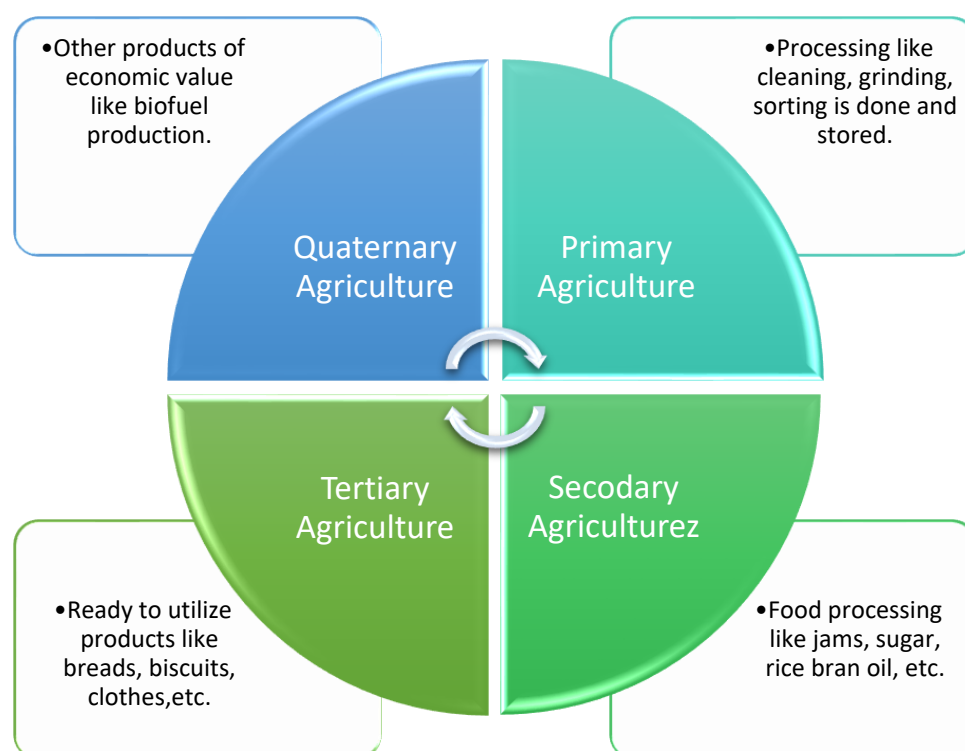


Figure 3. An overview of supportive and sustainable agriculture solutions (farm to folk).

6. Implications for Theory and Practice

Several scholarly debates around sustainable economies have neglected the role of rural economies in the sustainability debate. As a result, the theoretical contribution to the sustainability debate is highly aligned with the urban areas, which cannot be equated with a rural economic theoretical framework. Thus, it is necessary to further investigate rural sustainable development separately and in its localized context. This will create a paradigm shift in theory and practice, whereby policymakers and entrepreneurs, either small-scale farmers or other agents, will be informed according to their setting, compared with the duality approach that mainly benefits urban rather than rural economic agents, as illustrated in this study.

7. Conclusions

This study argued and concluded that substantial research evidence suggests there is a gap between rural and urban economic growth. As such, we debated whether advanced research development can help small farmers in rural areas to be innovative in their production to have extension services, which is crucial to future growth and reducing poverty. Agricultural development is needed, and the more research is undertaken in this field, the more the chances of improvement for rural economies. For its implementation, there is a high need to balance the centralization and decentralization of programs because this is key for rural development. Thus, we conclude that promoting sustainable rural economies is crucial for promoting long-term economic development, protecting the environment, and improving the quality of life of rural communities and their practices. As shown in this study, strategies such as promoting sustainable agriculture, investing in renewable energy, promoting rural tourism, and promoting community development through cooperatives and SHGs can help achieve these goals. Thus, we encourage policymakers, governments, international organizations, and civil society organizations to play a vital role in supporting these efforts and promoting sustainable rural development.

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