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Rural-Urban Linkages in Ethiopia: Practices, Challenges and Policy Frameworks: A Systematic Review

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Review article



Abstract

Rural-urban linkages are pivotal to the socioeconomic advancement of Ethiopia, a nation marked by a substantial rural demographic and swift urbanization. This paper analyzes the practices, challenges, and policy frameworks pertinent to these linkages in Ethiopia, exploring the diverse mechanisms facilitating interaction between rural and urban sectors, including migration, trade, and resource flows. Employing the methods delineated in the PRISMA diagram, the reviewer undertook a comprehensive search strategy utilizing the Google Scholar database. Initial findings yielded 19,000 records, which were meticulously narrowed to 55 articles based on specific criteria such as recency (studies published after 2000), duplication, contextual relevance to rural-urban linkages, and clear authorship, as illustrated in the PRISMA flow chart. Furthermore, the four objectives outlined in the methodology were thoroughly examined within the review. While these linkages present opportunities for both rural and urban areas, they also entail challenges such as uneven development, infrastructural deficits, and social inequities. Moreover, insufficient policy frameworks often inadequately address the complex interactions between rural and urban spaces. This document underscores the imperative for integrated and inclusive policies that foster balanced development, enhance infrastructure investment, and ensure equitable resource distribution. By effectively addressing these challenges and leveraging the potential of rural-urban linkages, Ethiopia can advance sustainable development and enhance the well-being of its diverse population.

Keywords: Rural-Urban Linkage, Rural Development Policy, Urban Development Policy, Policy Framework

1 INTRODUCTION

Ethiopia, characterized by its diverse geography and socio-economic disparities, is undergoing a significant transition driven by urbanization and rural transformation (Azeb, 2006). The migration of rural populations to urban centers in search of economic opportunities, coupled with the expansion of urban areas into suburban and rural regions, has resulted in increasingly intricate interdependencies between these spaces (Tegegne, 2005). A comprehensive understanding of rural-urban linkages

is crucial for the formulation of effective policies that harness synergies between rural and urban development while simultaneously addressing related challenges. Even though Ethiopia is known for its varied landscape and rich agricultural heritage, the country is experiencing rapid urbanization alongside persistent rural livelihoods. Consequently, grasping the dynamics of rural-urban interactions is fundamental to achieving sustainable development and equitable growth (Gete et al., 2006).

Rural-urban connections represent essential components of daily life for both rural communities and urban households, manifesting through the movement of people (migration), natural resources, goods and services, financial transactions, knowledge transfers, and income diversification avenues such as urban horticulture, livestock production, and non-agricultural rural employment (Tacoli, 2002). Traditionally, rural and urban growth has been viewed independently, leading to a neglect of their inherent connections, which constitutes one of the foremost challenges to the mutual development of both areas. Although commercial and market ties play a vital role, rural-urban linkages (RULs) encompass a multitude of complex forms that extend beyond simplistic assumptions (Tiffen, 2003). Acknowledging the interrelatedness of urban and rural frameworks is imperative; initiatives in one sector, if thoughtfully conceived and executed, can yield beneficial spillover effects in the other. For instance, the evolving patterns of food consumption in urban centers, driven by rapid urbanization and rising incomes, present significant opportunities for food producers in peri-urban and rural areas. These producers can increasingly focus on high-value agricultural products and establish contract farming arrangements with supermarkets and grocery chains (Demes, 2006).

Understanding and effectively leveraging these Rural-Urban Linkage (RUL) patterns is anticipated to assist urban residents in addressing their increasing food demands while simultaneously enhancing the income and livelihoods of rural food producers (Tacoli & McGranahan, 2015). Furthermore, the complexities of rural-urban linkages encompass intricate interactions between Ethiopia's rural heartland and its burgeoning urban centers, transcending mere geographical proximity to encapsulate economic, social, and environmental dimensions. Chief among these dimensions are economic flows: rural regions serve as fundamental providers of agricultural output, whereas urban centers function as crucial markets for these products (Showers, 2004). Additionally, rural-to-urban migration invigorates urban labor markets, with remittances often flowing back to rural communities. Social networks, including familial ties, cultural connections, and migration trends, establish intricate relationships that link rural and urban populations, subsequently influencing resource sharing, knowledge transfer, and social cohesion.

Infrastructure and services play a vital role as well, with access to fundamental amenities such as health-care, education, and transportation fostering connectivity between rural locales and urban hubs, which in turn shapes mobility patterns and socioeconomic development (Owuor, 2007). However, if the interconnections within these two systems are neither duly acknowledged nor effectively harnessed, they risk becoming fragile and potentially facing collapse (Barrios et al., 2006). An imbalance between the supply and management of natural resources and their corresponding demand serves as a pertinent example of this precarious situation, which could precipitate extreme poverty and the degradation of natural resources. Urbanization exerts considerable pressure on both natural resources and agricultural land if the intricate relationships with the rural economy are not managed well (Brueckner & Lall, 2015).

In numerous regions of Ethiopia, there exists a pronounced correlation among poverty, land degradation, and food insecurity, with impoverished RULs significantly contributing to this crisis. For instance, when examining the element of energy in isolation, substantial quantities of wood are required as fuel in expanding urban areas to fulfill the daily energy needs of households (Azeb, 2006). This scenario frequently leads to the overexploitation of forest resources in adjacent rural areas. Addis Ababa, for example, epitomizes a city whose natural forests were extensively depleted to satisfy the energy and construction demands of its growing population. Presently, eucalyptus plantations have been introduced in portions of formerly natural forest regions that have been partially degraded or converted into agricultural land (Von Braun, 2007).

The effective movement of goods and people between rural and urban areas in Ethiopia is considerably hampered by various systemic issues, including infrastructure deficiencies, inadequate transportation

networks, and insufficient services. These issues are compounded by socio-economic disparities manifested as inequalities in accessing resources, services, and opportunities—that perpetuate poverty and exclusion among rural and urban populations (Showers, 2004). Furthermore, rapid urbanization imposes significant pressure on natural resources, resulting in land degradation, water scarcity, and pollution, which adversely affect rural livelihoods while challenging urban sustainability (Ward & Shackleton, 2016). In summary, despite the considerable potential benefits of rural-urban synergies, multiple hurdles impede their realization. These key challenges include insufficient infrastructure, exacerbated socio-economic disparities, and pressing environmental stresses (Simon et al., 2004). To facilitate inclusive planning and create an enabling policy environment, it is paramount to embrace integrated spatial planning approaches that recognize the intricate interconnections between rural and urban contexts. Such strategies should prioritize investments in transport, energy, and communication infrastructure to enhance connectivity and reduce existing disparities (Abunga et al., 2012). Additionally, targeted rural development initiatives aimed at improving livelihoods, increasing agricultural productivity, and diversifying rural economies are essential. Strengthening governance structures and institutions to harmonize rural-urban development strategies and reinforce policy coherence is critical for capitalizing on the advantages of the rural-urban nexus. Ultimately, a comprehensive understanding and harnessing of rural-urban linkages are vital for fostering inclusive growth, alleviating poverty, and achieving sustainable development in Ethiopia (Von Braun, 2007). This paper aims to examine the practices, challenges, and policy frameworks shaping rural-urban linkages in the country.

The motivations and rationales underpinning the present systematic review are manifold and merit comprehensive exploration. First and foremost, the researcher's profound professional interest in dissecting the intricate dynamics and multifaceted elements of rural-urban linkages within the Ethiopian context is a primary driving force. This interest is likely rooted in the researcher's academic background, which provides a solid foundation for a nuanced understanding of the subject matter. Secondly, a notable deficiency of analogous studies within Ethiopia has been identified, revealing a significant gap in the existing literature. The scarcity of rigorous and in-depth research pertaining to the actual practices and nuances of rural-urban linkages further underscores this gap; indeed, many previous studies have been characterized by a lack of clarity, thereby failing to adequately address the critical issues pertinent to this topic. Consequently, this systematic review aspires to contribute meaningfully by filling these identified gaps. Additionally, the absence of a coherent policy framework specifically targeting rural-urban linkages compounds the challenges faced in this area. Although there are sporadic references to these issues within broader urban and rural development policies, the lack of a comprehensive guideline hampers effective action.

By elucidating these concerns, this review stands to offer invaluable insights to policymakers, enhancing their understanding and facilitating informed decision-making in relation to rural-urban linkages. Furthermore, many critical facts and challenges surrounding the interplay between rural and urban domains in Ethiopia remain under-explored and inadequately addressed. This review aims to raise awareness among key stakeholders—including politicians, city governors, academic institutions, and other relevant actors—encouraging them to prioritize and address these issues effectively, which is essential for fostering more robust and sustainable rural-urban linkages that can ultimately contribute to the nation's prosperity. Lastly, the review has the potential to serve as a pivotal educational resource, contributing to the capacity building of analysts, researchers, and policymakers by broadening their knowledge and understanding of the intricate elements that characterize rural-urban relationships in Ethiopia.

2 MATERIALS AND METHODS

This systematic review, conducted under the comprehensive title "Rural-Urban Linkages in Ethiopia: Practices, Challenges, and Policy Frameworks," endeavors to synthesize the prevailing concepts related to urban-rural linkage practices and the associated challenges within the context of Ethiopia's policy framework. The primary objective of this review is to reveal the intricacies of rural-urban linkages while providing a factual overview of the policies that address the following critical issues:

1. What are the universal theories that define rural-urban linkages?
2. What are the empirical realities surrounding urban-rural linkage practices in Ethiopia?
3. What challenges persist in the endeavor to connect rural and urban areas?
4. Is there a coherent policy framework in place that supports rural-urban linkages in Ethiopia?

For the purposes of this review, rural-urban connectivity is operationally defined as the various connections, interactions, and interdependencies that exist between rural and urban areas within a specific geographic region or economy ([Awumbila et al., 2014](#)). These linkages encompass a multitude of flows, including goods, services, capital, information, and human movement between rural and urban centers.

The significance of rural-urban linkages cannot be overstated, as they are pivotal for fostering economic development, social integration, and balanced regional growth ([De Brauw et al., 2014](#)). Such linkages involve a diverse array of activities ranging from trade and migration to infrastructure development, technology transfer, and resource sharing all of which contribute to the reciprocal development and prosperity of both rural and urban locales. A nuanced understanding and effective harnessing of these linkages are essential for achieving sustainable development and for addressing pressing issues such as poverty, inequality, and environmental degradation.

In conducting this review, the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) checklist was employed as a guiding framework. A rapid literature review was executed to identify pertinent literature regarding rural-urban linkages, incorporating all types of studies and related gray literature without any temporal constraints. The search strategy was meticulously directed by full-text evaluations, utilizing the Google Scholar database as the primary resource.

Manual screening was performed by a designated reviewer, resulting in an initial identification of 19,000 records, which were subsequently refined to 16,348 after the removal of duplicates. Through a systematic screening process based on titles, 55 articles were deemed eligible for full-text review. Studies were excluded based on criteria such as out-datedness ($n = 2052$), duplication ($n = 401$), and lack of relevance to the context of rural-urban linkage ($n = 1331$), as well as the absence of a clear publisher. Detailed documentation of this process is illustrated in the accompanying PRISMA flowchart (Figure 1).

3 RESULTS

3.1 Theoretical Frameworks in Rural-Urban Linkages

Various universal theories and concepts provide a robust framework for understanding the intricate and multifaceted nature of rural-urban linkages, irrespective of the specific contextual underpinnings. These theoretical constructs elucidate the dynamics, interactions, and implications that characterize the relationships between rural and urban spheres ([Satterthwaite & Tacoli, 2006](#)). Among these, the most prominent theories are the following:

1. **Central place theory:** Originally formulated by Walter Christaller in the 1930s, Central Place Theory elucidates the spatial configuration and hierarchical organization of human settlements, which is predicated upon the distribution of goods and services. In the fundamental assumption of this theory is the notion that urban centers function as pivotal locations that provide higher-order goods and services, while their rural counterparts cater to lower-order needs. Thus, the theory underscores the complementary relationship that exists between rural and urban areas, collectively working to satisfy the diverse needs of their populations ([Victor, 2011](#)).
2. **Bid-rent theory:** Introduced by the eminent economist Johann Heinrich von Thünen in the early 19th century, the Bid-Rent Theory articulates the relationship between land use and transportation costs. This theory posits that the spatial distribution of land use is fundamentally determined by the willingness of businesses and households to bear the costs associated with accessing urban

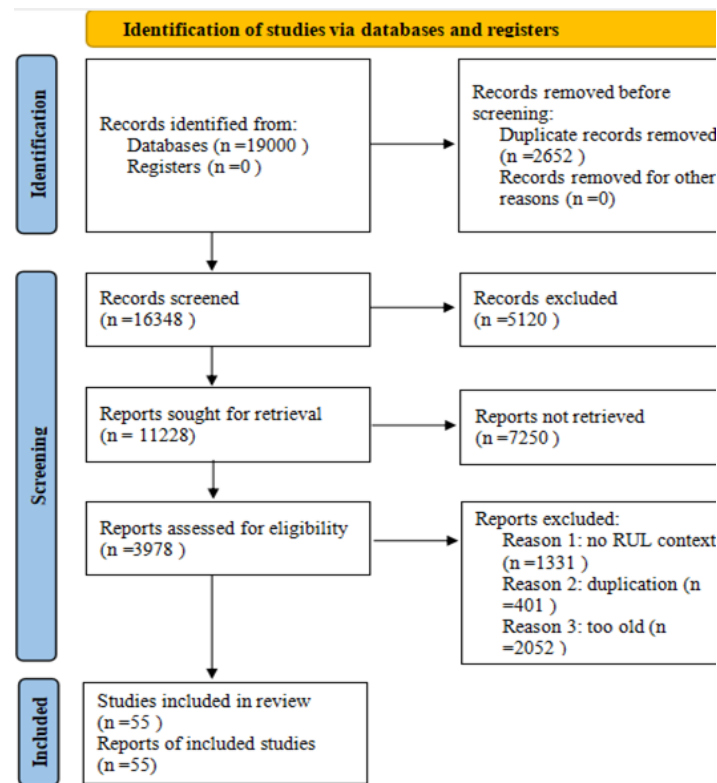


Figure 1: PRISMA Flowchart of the study

markets. As distance from urban centers increases, transportation expense rises, and land located nearer to these urban focal points commands elevated rents, thereby being allocated for higher-value activities (Victor, 2011).

3. **Gravity model:** An analytical tool adapted from the principles of physics, the Gravity Model is frequently employed to assess spatial interactions among regions or settlements. This model rests on the assumption that the volume of interactions—encompassing trade and migration—between two locales is directly proportional to the population sizes of those locales and inversely proportional to the distance that separates them. Within the context of rural-urban linkages, the Gravity Model serves to elucidate the flows of goods, services, and individuals between rural and urban settings, informed by the relative population sizes and geographic proximities involved (Akkoyunlu, 2015).
4. **Core-periphery model:** The Core-Periphery Model delineates the spatial organization of regions or economies, wherein a central urban core is enveloped by a periphery of rural territories. The core is typically characterized by a concentration of economic activities, advanced infrastructure, and a wealth of services, whereas the peripheral regions may suffer from developmental disparities and limited access to resources. This model distinctly highlights the unequal distribution of wealth, power, and opportunities between rural and urban areas, all while elucidating the potential for urban centers to exploit the resources that rural areas possess (Akkoyunlu, 2015).
5. **Spatial interaction theory:** This theory investigates the various elements that affect the movement and exchange of goods, services, and information between distinct locations. Central to this theory are variables such as distance, transportation networks, economic affiliations, and cultural connections, which collectively shape the dynamics of spatial interactions. In the context of rural-urban linkages, this theoretical framework facilitates the examination of patterns and intensities in interactions between rural and urban areas, as well as their implications for regional development (Komiya & Takeuchi, 2006).
6. **The new economic geography (NEG):** NEG further elaborates on these spatial linkages by focusing on the influence of urban centers on surrounding rural territories. Historically, the discourse surrounding the connectivity between rural and urban areas has often been framed as a

political choice, supported by Lewis's two-sector models (1954) (Tacoli, 2004) and subsequent equilibrium-based models of structural transformation (Farrington, 2002) and agglomeration (United Nations, 2017). These frameworks propose a beneficial relationship among urbanization, economic development, and poverty alleviation. Additionally, the paradigm of functional regional growth posits that regional development is a facet of national prosperity, achievable through either growth center strategies or rural service center strategies (International Food Policy Research Institute (IFPRI), 2017).

7. **The growth center strategy, rooted in Perroux's growth pole theory**, advocates for urban industrial development across multiple centers to generate spillover effects that contribute to the modernization of rural regions. Conversely, the rural service center strategy emphasizes the emergence of smaller service centers and their essential facilities, enhancing market accessibility for producers. By bolstering rural specialization and commercialization, these initiatives form an integral part of national economic development. However, it remains contentious that these models, often favoring the upper echelons of urban hierarchies, may inadvertently exacerbate biases against rural areas in economic development policy frameworks (Gren & Andersson, 2018).
8. **Historical-structuralist approaches:** These have elucidated the inherent imbalances engendered by urbanization, illustrating how the concentration of global capital within urban centers and industrial sectors detrimentally impacts rural societies. This dynamic fosters enduring spatial, social, and economic disparities both nationally and globally (Sutherland et al., 2014; Zewdu & Malek, 2010). In developing countries, the ramifications of progress are often limited to small urban centers and rural locales, as these development hubs maintain economic connections to external and international entities. Moreover, frameworks that advocate for the polarization of populations and capital accumulation in urban areas necessitate substantial public investment, efficient and equitable infrastructure, political will for regional balance, considerable energy expenditure, and oversight of externalities. A secondary dimension of this discussion considers the influence that rural regions exert on urban centers and non-agricultural activities. The discourse on regional development acknowledges that the viability of small centers is intrinsically linked to advancements within their hinterlands. Nonetheless, it is the literature on rural development linkages that explicitly addresses this relationship through the lens of specific consumption and production interactions (Dicks et al., 2017). Recognizing a notable gap in the literature on rural dynamics and the potential for economic advancement in these areas, researchers have begun to explore the advantages and disadvantages of rural-urban linkages in such regions (Diaz-Balteiro et al., 2016; Pullin et al., 2013; Sugiyama et al., 2017) assert that conflicting visions regarding the nature of these linkages have resulted in policies that misconstrue the relationship between urban and rural growth, often overlooking the mutually beneficial connections that exist. Consequently, preliminary models have been developed that propose a synergistic framework for interactions between urban centers and their rural hinterlands (Abu et al., 2014).
9. **Rural-urban continuum:** Since the late 1980s, geographers and political economists have suggested alternative notions regarding the role of space and place in development, portraying space as a social construct. In this context, rural areas and cities are no longer perceived as opposing forces (Pires et al., 2017). This shift encompasses the concept of the "rural-urban continuum" (Khoshnava et al., 2018) and the understanding that rural-urban interactions are not merely indicators of the "development process" but are themselves dynamic components in the transformation of rural and urban locales (Zhou & Moinuddin, 2017). Rondinelli's framework (1988), titled Urban Functions in Rural Development (UFRD) (Diaz-Balteiro et al., 2016), can be viewed as an attempt to integrate rural and urban areas within cohesive regional development strategies. However, similar to Christaller's classical Central Place Theory (United Nations (UN), 2019), the UFRD approach did not adequately account for the distinctive attributes of urban and rural environments. The innovative contributions of Douglass (1998) regarding regional systems (Owusu, 2005) emphasized the necessity for a spatially nuanced development strategy, thereby offering a departure from the predominantly structural perspective of urban-rural dynamics toward a more intricate understanding of their interactions.
10. **The dynamics of proximity:** as explored in the work Proximity Dynamics ; (Jasaw et al., 2014), this concept distills insights from both Anglo-Saxon and French paradigms (Antwi & Analoui, 2008; Mukhopadhyay, 2016; Osei-Assibey, 2014) to delineate the importance of institutional, or-

ganizational, and geographical proximity. It posits that the primary determinant of the attractiveness and competitive positioning of a local production space lies in its ability to harness specific assets (Tegegne, 2005). This capacity is contingent upon the degree of independence or subordination to overarching economic imperatives, reflecting the extent of interdependency with surrounding areas. Moreover, scholarly examinations revisiting Economic Base Theory (Mauran, 2019) advocate for a perspective that prioritizes spatial integration among the economic frameworks of nearby localities, rather than focusing on the relationship between the region's economy and its local base. In African context, research underscores the critical role of inter-locality integration, highlighting that cities function as open, remote systems reliant on external trade for their viability. However, true wealth generation is invariably tied to the local production of goods and services. Cities must enhance the value of items produced elsewhere rather than merely engage in their trade and distribution. The efficacy, ingenuity, and dynamism of urban enterprises correlate directly with the generation of wealth and employment opportunities.

These theoretical foundations provoke a pertinent inquiry: whether the observed patterns of regional development can be ascribed primarily to metropolitan influences or to endogenous and upward forces within non-metropolitan areas, particularly concerning the interactions among diverse adjacent economies (Bebbington et al., 2018).

Collectively, these universal frameworks give insightful paradigms for comprehending the intricate dynamics underlying rural-urban linkages and inform policy initiatives aimed at fostering equitable regional development, mitigating disparities, and advancing sustainable urbanization. While the applicability of these theories may necessitate contextual adjustments, their fundamental principles retain their relevance across various geographic, social, and economic landscapes.

3.2 Understanding Rural-Urban Linkages

Characterizing the boundaries between rural and urban areas poses significant challenges, as the distinctions between these regions increasingly unclear and their traditionally separate functions become intertwined. This complexity necessitates a nuanced approach to accurately conceptualize rural-urban relations, ultimately leading the United Nations Centre for Human Settlements and the European Union Committee on Regional Development to adopt the concept of Rural-Urban Linkages (RUL), which highlights the evident and subtle interdependencies between the two realms. RUL encompasses various economic, social, and political connections manifesting in diverse forms. The subsequent discussion will explore several key components of these linkages.

First, the flow of goods illustrates how rural areas serve as primary suppliers of food for urban populations, labor for non-agricultural endeavors, and raw materials for industries typically located in urban centers. In the context of rapid urbanization and industrialization, agricultural dominance within rural economies significantly influences the trajectory toward industrial growth. Furthermore, urban areas act as conduits for goods manufactured and imported into rural locales (National Development Planning Commission (NDPC), 2019), including manufactured or incentive goods. Urban centers not only provide markets for rural commodities but also create demand for products and services generated in rural areas, thereby establishing a symbiotic relationship between the two. The commercialization and diversification processes arise from sectorial linkages between resource regions and market hubs in agriculture and manufacturing (Tacoli, 2003). These interactions occur within a production framework, where two spatial entities engage in both forward and backward production relationships; urban centers typically supply farmers with inputs, while the agricultural sector, in turn, provides essential resources to the manufacturing sphere. The reciprocal flow of goods necessitates integrated rural and urban policies that prioritize cross-sectorial linkages and highlight the interconnected demands of both arenas. Second, capital flow encompasses various financial exchanges, including remittances from migrants to their families and communities, urban investments in rural areas, as well as credit extended from urban institutions to rural locales. A notable complication within this linkage is the tendency for urban-derived capital to be disproportionately concentrated in affluent metropolitan areas, both nationally and globally (Showers, 2004). Third, the flow of individuals pertains to the movement of people

between rural and urban regions, whether for daily commutes, temporary stays, or permanent relocation. This migratory pattern is predominantly unidirectional, characterized by an influx of individuals transitioning from rural locales to urban settings. In developing nations, this form of relocation is a vital strategy that enables impoverished rural households to diversify their income and mitigate poverty (Bebbington et al., 2018). Lastly, the flow of information highlights the exchange of knowledge and data between rural and urban environments, encompassing details regarding resources and raw materials moving from rural areas to urban centers, market trends and pricing of agricultural products flowing back to rural regions, and job opportunities available for potential migrants. This multifaceted interplay underscores the importance of understanding RULs in formulating effective policies that address the complexities inherent in rural-urban dynamics.

3.3 Rural-Urban Linkage Practices in Ethiopia

In Ethiopia, the dynamics of rural-urban linkages are evident through a multitude of practices that foster interactions and exchanges between these distinct areas (Von Braun, 2007). Prominent among these practices is agricultural trade, where rural regions function as essential suppliers of agricultural products transported to urban centers for consumption and processing. In turn, urban markets provide rural farmers with vital inputs, including fertilizers, pesticides, and machinery (Bebbington et al., 2018). Labor migration is another significant aspect, with individuals moving from rural locales to urban centers in search of employment opportunities, thereby contributing to the urban workforce and alleviating rural unemployment (Gete et al., 2006). Additionally, remittances sent by urban migrants to their families in rural areas bolster household incomes and can facilitate investments in agricultural pursuits or other rural development initiatives (Tacoli, 2002).

Urban areas often emerge as epicenters of infrastructure development, where enhancements in transportation, communication, and energy can greatly benefit rural regions through improved connectivity and access to essential services (Zewdu & Malek, 2010). Furthermore, urban centers serve as hubs of technology transfer, disseminating knowledge and innovation to rural areas via extension services, training programs, and demonstrations, which ultimately enhance agricultural productivity and rural livelihoods (Zewdu & Malek, 2010). Additionally, market linkages are reinforced as rural producers engage with urban markets to sell their goods, while urban consumers turn to rural regions for fresh produce. The enhancement of these market linkages through improved transport infrastructure and market information systems can significantly elevate market access and efficiency for both rural and urban actors (Zewdu & Malek, 2010). Social and cultural exchanges also play a vital role, as interactions via migration, trade, education, and other activities enrich social integration and foster cultural diversity, facilitating the exchange of ideas and practices. Lastly, environmental cooperation underscores the shared reliance of rural and urban areas on natural resources such as water, land, and forests. Collaborative efforts to sustainably manage these resources are critical for promoting environmental protection and addressing pressing challenges, including deforestation, land degradation, and water scarcity (Tacoli & McGranahan, 2015). Collectively, these interconnected practices highlight the complex nature of rural-urban linkages in Ethiopia, underscoring the necessity of recognizing and leveraging these connections for sustainable development and inclusive growth. To achieve this, effective policies and strategies are required to harness the potential of rural-urban linkages while addressing corresponding challenges such as infrastructure deficits, rural poverty, and environmental degradation (Pullin et al., 2013).

3.4 Rural-Urban Linkage Challenges in Ethiopia

In Ethiopia, notwithstanding the existing rural-urban linkages, a myriad of challenges substantially impedes the effective integration and interaction between rural and urban areas. Among the most significant challenges identified by (Von Braun, 2007) is the deficiency of infrastructure. Rural regions frequently suffer from inadequate access to fundamental infrastructural elements such as roads, electricity, and potable water supply, thereby limiting connectivity and obstructing the movement of goods, services, and individuals across the rural-urban divide. Furthermore, limited market access exacerbates

this situation; the combination of poor transport infrastructure and deficient market information systems significantly hampers rural producers' ability to engage with urban markets and secure equitable prices for their products. Conversely, urban consumers encounter hurdles in sourcing quality agricultural products from their rural counterparts (Zewdu & Malek, 2010). Additionally, the dynamics of rural-urban migration precipitate heightened urban population growth, which in turn intensifies competition for a finite number of job opportunities within urban locales, leading to a pervasive state of unemployment and underemployment. This phenomenon not only exacerbates urban poverty but also fosters social tensions within urban settings (Tacoli, 2002). Compounding these issues is the persistent rural poverty that constrains rural households' capacity to invest in essential areas such as education, health, and productive assets, thereby perpetuating a vicious cycle of poverty that restricts rural-urban mobility and integration. Moreover, the pressures of rapid urbanization and escalating population growth engender fierce competition for natural resources, such as land, water, and forests, culminating in conflicts between rural and urban stakeholders over resource allocation (Tegegne, 2005). Environmental degradation, a consequential effect of unsustainable land use practices, deforestation, and soil erosion in both spheres, further worsens challenges such as climate change, water scarcity, and food insecurity (Tacoli & McGranahan, 2015). Moreover, disparities in access to essential social services—most notably education and healthcare—between rural and urban areas contribute to pronounced inequalities in human development outcomes and hinder progress toward inclusive growth and poverty alleviation (Tegegne, 2005).

Equally crucial are the governance and institutional weaknesses that pervade efforts to bridge rural-urban disparities; weak governance structures, coupled with limited institutional capacity and ineffective policy implementation, present formidable barriers to the promotion of sustainable development (Ward & Shackleton, 2016). Additionally, social and cultural barriers, fueled by divergent social norms, cultural practices, and language differences between rural and urban populations, pose significant impediments to effective communication, collaboration, and integration between these communities. Addressing this multifaceted array of challenges necessitates comprehensive and integrated policy frameworks that prioritize investment in rural infrastructure, stimulate rural development, and encourage livelihood diversification. Additionally, it is imperative to enhance urban governance and service delivery mechanisms while fostering sustainable and inclusive growth in both rural and urban contexts. Recognizing and accommodating the unique needs and priorities of various regions and population groups within Ethiopia will be essential in strengthening rural-urban linkages and promoting equitable development for all.

3.5 Rural-Urban Linkage and Policy Frameworks in Ethiopia

The establishment of a robust policy framework aimed at fostering rural-urban linkages within the context of Ethiopia necessitates a comprehensive and multifaceted approach that adeptly addresses the diverse challenges and opportunities inherent in the integration of rural and urban areas. To this end, the following outline delineates a potential foundational structure for such policies. First, the emphasis on Integrated Development Planning has a paramount importance; it calls for the formulation and implementation of cohesive spatial planning strategies that recognize the intricate interdependencies characterizing rural and urban environments. This initiative must involve collaborative discourse among national, regional, and local governmental entities to ensure alignment and coherence in both development planning and investment strategies (United Nations, 2017). Second, Infrastructure Development emerges as a critical priority, advocating for significant investments in rural infrastructural components such as roadways, bridges, energy systems, water supply networks, and telecommunications. Enhancing connectivity between rural and urban centers will serve to facilitate the seamless movement of goods, services, and populations while concurrently mitigating transport-related expenses (Abunga et al., 2012). Moreover, the establishment of mechanisms for Market Access and Value Chains is essential to bolster market infrastructure and enhance the competitiveness of rural producers. This can be achieved through the support of initiatives such as agricultural cooperatives, the organization of farmers, and the implementation of market information systems—all of which play a vital role in strengthening the nexus between rural producers and urban markets (Abunga et al., 2012). Furthermore, the promotion of Rural Business Development is vital in diversifying rural economies and generating local

employment opportunities. By providing training, technical support, and accessible financing options for rural entrepreneurs—particularly targeting youths and women—Ethiopia can cultivate businesses across various sectors, including agriculture, agribusiness, tourism, and handicrafts (United Nations, 2017).

In tandem with these initiatives, the Provision of Social Services must be prioritized to improve access to education, healthcare, water, and sanitation services in rural areas, thereby enhancing human capital development and overall quality of life. Additionally, efforts should be made to expand the reach of social protection programs and safety nets to minimize vulnerability and alleviate poverty among the rural populace (Tegegne, 2005). Next, an emphasis on Natural Resource Management is crucial, as it strengthens efforts toward the sustainable management of land, water, forests, and biodiversity resources. Community-based approaches to natural resource management should be championed, promoting local community involvement in decision-making processes that enable them to benefit from the sustainable utilization of these resources (Sugiyama et al., 2017). To ensure the successful execution of these strategies, Governance and Institutional Strengthening must be prioritized. This involves reinforcing administrative frameworks and institutional capacities at all levels to guarantee effective implementation, monitoring, and evaluation of rural-urban linkage policies and programs. Promoting transparency, accountability, and participation of active citizen in decision-making processes fosters greater trust and social cohesion within communities (Tegegne, 2005). Lastly, investment in Research and Innovation is imperative to address emerging challenges and capitalize on opportunities at the rural-urban nexus. By promoting the development and adoption of suitable technologies and practices, Ethiopia can enhance agricultural productivity, add value, and improve market access for rural producers. Collectively, these strategies present a holistic approach to fostering sustainable rural-urban linkages that can significantly contribute to Ethiopia's economic and social development.

In an era where the dynamics of rural and urban interplay significantly influence developmental trajectories, the imperative of capacity building and knowledge sharing emerges as a pivotal strategy for optimizing rural-urban linkage initiatives. Comprehensive programs aimed at enhancing the competencies of policymakers, government officials, civil society organizations, and a multitude of stakeholders are essential to effectively design, implement, and evaluate these initiatives. Furthermore, the establishment of robust mechanisms for knowledge sharing, networking, and learning exchanges can facilitate the dissemination of best practices and valuable lessons learned from both successful experiences within Ethiopia and other nations. Complementing these efforts, the fostering of partnerships and collaborations is integral to creating synergistic relationships among government agencies, development partners, private sector entities, civil society organizations, and local communities. Such collaborations can leverage diverse resources, expertise, and networks, ultimately working toward the realization of shared rural and urban development objectives. It is crucial to promote inclusive and participatory strategies that empower marginalized groups while simultaneously championing social inclusion and gender equality, as highlighted by (Gete et al., 2006). By adopting a comprehensive policy framework that encompasses these vital areas, Ethiopia stands poised to harness the significant potential inherent in rural-urban linkages, thereby advancing inclusive and sustainable development, alleviating poverty, and successfully achieving its national development aspirations.

4 DISCUSSION

The rural-urban linkage in Ethiopia is informally manifested through a myriad of mechanisms that underscore the interconnectedness of these two distinct yet interdependent realms (Tsfaye, 2014). One prominent manifestation of this linkage is the agricultural value chain, wherein urban areas predominantly rely on agricultural products for their daily sustenance, simultaneously serving as market destinations for these products and thereby benefiting rural producers (Tsfaye, 2014). Furthermore, infrastructure development—encompassing roads, bridges, and market facilities—plays a critical role in enhancing rural-urban connections, facilitating the movement of goods and people across these regions (Kidanemariam, 2010). Labor migration represents another significant aspect of this linkage, as rural workers migrate to urban centers in pursuit of improved employment opportunities, thus addressing the labor demands of urban communities. Additionally, remittances sent back by urban migrants

to their families in rural areas provide essential economic support, thereby reinforcing the rural-urban nexus in Ethiopia. The advent of modern information and communication technologies has further facilitated these connections by enhancing communication capabilities through mobile phones and internet access, which have become vital tools for bridging the gap between rural and urban populations (Tesfaye, 2014). It is important to note that these examples are not exhaustive; numerous other manifestations of rural-urban linkages exist, as previously detailed in the results section of this review. Collectively, these findings underscore the urgent need for a coordinated effort to establish an appropriate policy framework aimed at enhancing the interconnectivity of rural and urban areas. Policies must prioritize holistic development, equitable resource allocation, and sustainable urbanization. By investing in rural economies through the provision of essential services, infrastructure, agricultural inputs, and social services—as well as creating local job opportunities—it is possible to mitigate rural-urban migration while simultaneously bolstering the productivity and resilience of rural communities (Tegegne, 2005). Addressing the complex challenges posed by urbanization necessitates improved access to basic services and amenities, the upgrading of informal settlements, and the implementation of sustainable urban planning practices. Moreover, it is imperative that policies prioritize environmental protection, land tenure security, and social inclusion to alleviate the adverse impacts of urbanization on vulnerable urban communities (Gete et al., 2006).

5 CONCLUSIONS

In conclusion, this systematic review elucidates the intricate dynamics of rural-urban linkages in Ethiopia, shedding light on the multifaceted challenges that these interactions present. By adopting a holistic approach to policy formulation and implementation, Ethiopia has the opportunity to leverage the potential inherent in rural-urban interactions, thereby advancing its sustainable development goals and enhancing the overall well-being of its citizens. The strengths of this review are noteworthy and can be delineated as follows:

1. The systematic review undertook an extensive search via Google Scholar to identify pertinent studies, thereby ensuring a thorough understanding of the existing literature surrounding rural-urban linkages in Ethiopia. This exhaustive approach not only enriches the academic discourse but also provides a solid foundation for future research.
2. The study maintained a clear and concentrated focus on rural-urban linkages within the Ethiopian context, which facilitated an in-depth analysis and the derivation of meaningful conclusions that are specifically relevant to the country's unique socio-economic landscape. By narrowing its scope, the review was able to present a detailed examination of practices, challenges, and policy frameworks that are pertinent to Ethiopia.
3. In addition to identifying prevalent practices and challenges, the study also engaged in a thorough analysis of existing policy frameworks. This incorporation of policy analysis significantly enriches the review by evaluating the effectiveness of current policies and proposing actionable recommendations for their enhancement.
4. iv. The review adopted a comprehensive perspective by examining various dimensions of rural-urban linkages, including migration patterns, trade networks, infrastructure development, and social disparities. This holistic approach facilitates a nuanced understanding of the complex dynamics that shape rural-urban interactions in Ethiopia, ultimately contributing to the formulation of more effective and contextually relevant policies aimed at fostering sustainable development.

The review, while comprehensive, is not without its limitations. Firstly, scope limitations arise from predefined search terms and inclusion criteria, which may inadvertently exclude critical aspects of rural-urban linkages or relevant studies, resulting in gaps in the analysis. Secondly, the quality of the included studies varies, potentially undermining the reliability of the findings due to issues such as sample size, methodology, and data collection techniques, which may introduce bias or inaccuracies. Thirdly, the restriction to English-language articles may exclude pertinent studies published in other languages, such as Amharic, thereby creating a language bias that detracts from the review's compre-

hensiveness—particularly regarding research from local scholars or organizations. Additionally, publication bias poses a risk, as studies yielding statistically significant results are more likely to be published, while those with null or negative findings may remain unreported, thus skewing overall conclusions and impacting the review's validity. Furthermore, the heterogeneity of the included studies, in terms of methodology, geographical focus, and research objectives, complicates the synthesis of findings and the derivation of meaningful conclusions. The review's temporal relevance is also limited by its focus on studies published within a specific timeframe, potentially overlooking recent developments in rural-urban dynamics that are crucial for current policy and practice. Moreover, the context specificity of the findings, primarily related to Ethiopia, may limit their applicability to other countries or regions with differing socio-economic contexts or levels of urbanization. Lastly, biases in policy analysis may arise if researchers possess pre-existing perspectives that influence their interpretation of policy frameworks. Overall, further research is essential to address these limitations and to evaluate the effectiveness of existing policies while identifying innovative strategies to tackle emerging challenges in rural-urban dynamics.

6 CONFLICT OF INTEREST STATEMENT

No conflict of interest was reported.

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