

Rural Transformation in Saudi Arabia: A Strategic Spatial Development Planning Framework under Vision 2030

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Executive Summary/Abstract

Original Research Article

Executive Summary: This paper examines the current policies, strategies, and challenges related to rural development in Saudi Arabia, aligning them with the objectives of Vision 2030. Rural areas face multifaceted challenges including water scarcity, environmental degradation, and limited economic diversification. The analysis highlights five primary policy areas: the Sustainable Agricultural Rural Development Program (REEF), income diversification through rural tourism and crafts, infrastructure and service enhancement, environmental sustainability, and social empowerment of youth and women. Challenges include environmental constraints, economic limitations, social barriers, technological adoption gaps, and institutional coordination issues. The paper proposes integrated solutions including modern irrigation techniques, digital marketing platforms, improved transport and healthcare services, environmental conservation programs, and capacity-building initiatives. The study concludes with recommendations to strengthen rural resilience, enhance livelihood opportunities, and promote balanced regional development.

Abstract: This study explores rural development strategies in Saudi Arabia, focusing on policies, challenges, and proposed solutions. A descriptive analytical approach was used to review government reports, Vision 2030 program documentation, and relevant academic literature. The findings indicate that while significant initiatives have been implemented, such as the Sustainable Agricultural Rural Development Program and the diversification of rural economies, substantial challenges remain, including water scarcity, limited market access, and environmental degradation. The proposed solutions emphasize sustainable agricultural practices, technological adoption, enhanced infrastructure, and socio-economic empowerment. The paper concludes by offering policy recommendations to advance rural development goals in alignment with Vision 2030.

Keywords: Rural development, Saudi Arabia, Vision 2030, sustainability, agricultural policy, infrastructure, empowerment.

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1. Introduction

Rural development is a critical component of national progress, contributing to economic

diversification, social stability, and environmental sustainability. In Saudi Arabia, rural areas are integral to achieving the objectives of Vision 2030, which seeks to reduce dependence on oil revenues,



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enhance quality of life, and preserve cultural heritage. This paper examines the Kingdom's rural development strategies, identifying existing policies, challenges, and feasible solutions.

2. Literature Review

2.1 Empirical studies in Saudi Arabia

Saudi-focused empirical work spans rural tourism, value chains, and smallholder livelihoods. Hassan et al. (2022) evaluate the impact of rural tourism development in Al-Ahsa and find that social, economic, and environmental effects are positively associated with residents’ overall satisfaction. AlAli et al. (2024) extend the Al-Ahsa literature by linking tourist values, biodiversity protection, and mobility

behavior to subjective well-being. In agricultural value chains, Mehrez et al. (2023) analyze the Khawlani coffee local value chain in Jazan and propose marketing strategies to increase yields and farmer incomes. Ziad et al. (2023) estimate the cost function of coffee production in Jazan, evidencing structural cost pressures that suppress optimal yields. FAO (2024) provides a baseline characterization of Saudi coffee farmers across Jazan, Asir and Al-Baha—education levels are relatively high among growers—offering critical inputs for targeted extension. Beyond coffee, studies on apiculture and honey quality (e.g., Albarrak & Gray, 2023; Alarjani et al., 2024) highlight the economic potential of beekeeping and the biochemical properties of Saudi honeys, with implications for rural SMEs.

Table 1 Literature Review Summary

Study	Setting	Method	Key Findings	Policy Relevance
Hassan et al. (2022)	Saudi Arabia – Al-Ahsa	Survey	Rural tourism ↑ resident satisfaction	Tourism as diversification
AlAli et al. (2024)	Saudi Arabia – Al-Ahsa	Survey	Biodiversity & mobility affect well-being	Integrate environmental & tourism policy
Mehrez et al. (2023)	Saudi Arabia – Jazan	Value chain analysis	Khawlani coffee marketing gaps	Specialty crop promotion
Ziad et al. (2023)	Saudi Arabia – Jazan	Cost function estimation	Cost pressures reduce yields	Support input subsidies/efficiency
FAO (2024)	Saudi Arabia – Jazan, Asir, Al-Baha	Baseline survey	High education levels among farmers	Targeted extension services
Albarrak & Gray (2023)	Saudi Arabia	Review	Beekeeping potential & challenges	Promote apiculture SMEs

OECD (2020)	International	Framework	Shift to place-based multi-sector approach	Adopt rural proofing & well-being metrics
World Bank (n.d.)	International	CDD framework	Participatory planning success	Apply local-driven investment models

2.2 Policy and program documents in Saudi Arabia

Programmatic and policy sources document the rapid institutionalization of rural development under Vision 2030. The Sustainable Agricultural Rural Development Program (REEF) identifies eight supported sectors—including Arabica coffee, beekeeping and honey, rainfed cereals, and others—based on a national comparative advantage study (UNCTAD/MEWA brief, 2023). Authoritative overviews (Saudipedia, 2024) and official portals (MY.GOV.SA, 2025) emphasize smallholder empowerment, income stabilization, and market access. Media and official communications (SPA, 2025; Arab News, 2024) highlight ongoing initiatives such as boosting rainfed crop yields and training programs for field advisers, evidencing an implementation focus on capacity building and technology adoption.

2.3 International frameworks and comparative insights

Internationally, the OECD’s evolving rural development framework—summarized in Rural Well-being: Geography of Opportunities—shifts policy from a farm-only lens to place-based, multi-sector approaches and well-being outcomes.

Complementary guidance on "rural proofing" argues for mainstreaming rural impact assessment across sectoral policies. The World Bank’s Community- and Local-Driven Development approaches prioritize participatory planning and devolved investment, aligning with Saudi goals to strengthen local ecosystems. UNDP strategic documents and SDG monitoring reinforce integrated, climate-resilient, inclusive approaches to rural transformation.

2.4 Synthesis and gaps

The literature underscores clear momentum in Saudi rural development—particularly in tourism, specialty crops (coffee), and apiculture—yet also reveals evidence gaps: longitudinal evaluations of REEF interventions; rigorous assessments of market access, digital uptake, and logistics in peripheral regions; and causal studies linking program participation to income, resilience, and well-being. Comparative frameworks suggest three priorities for future research: (1) place-based, multi-sector metrics of rural well-being; (2) institutional arrangements for cross-ministerial coordination and rural proofing; and (3) scalable models of community-driven planning and finance, as shown in Figure 1.

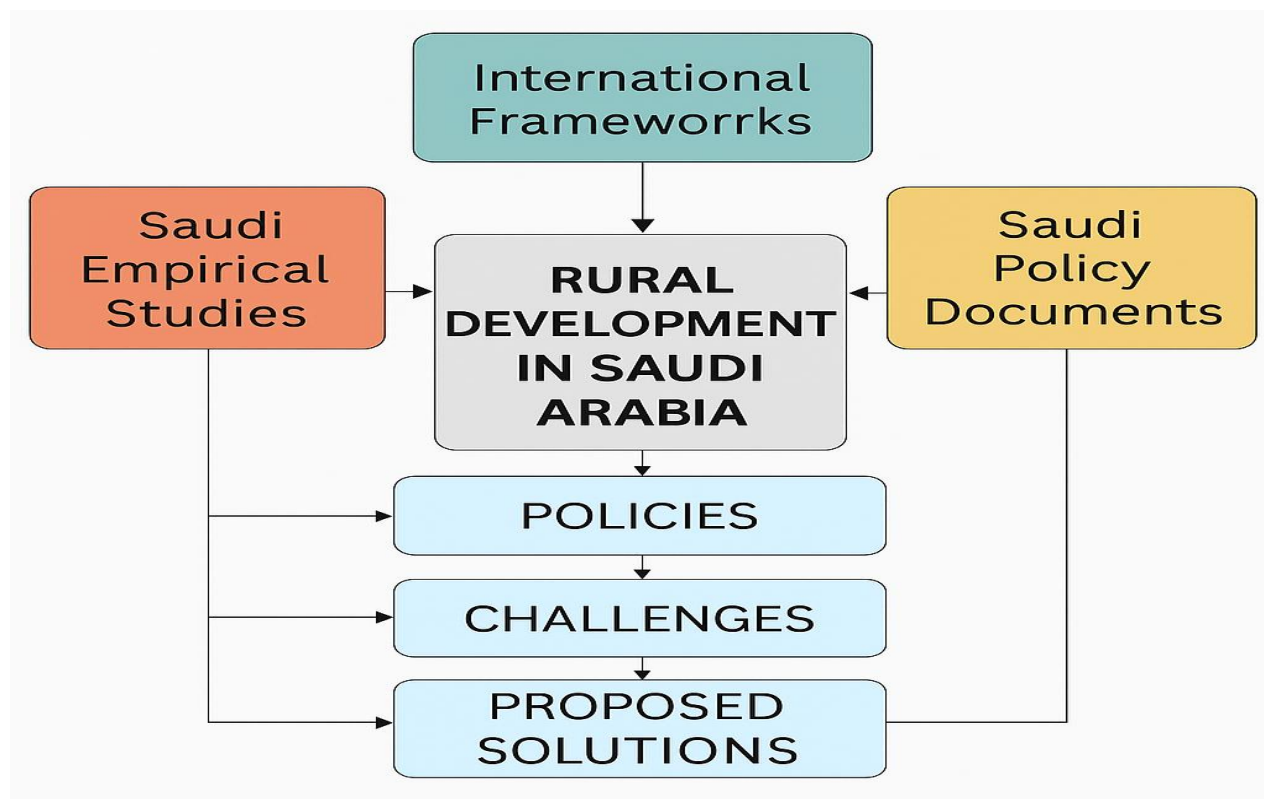


Figure 1: Theoretical Framework for Rural Development in Saudi Arabia

3. Methodology

This research adopts a descriptive and analytical methodology, utilizing secondary data from government publications, Vision 2030 documents, and academic articles. The study employs a qualitative assessment of policy frameworks, supported by a SWOT analysis to evaluate strengths, weaknesses, opportunities, and threats within the rural development landscape.

4. Results

4.1 Policies and Strategies

Key policies include: (1) Sustainable Agricultural Rural Development Program (REEF); (2) diversification of income sources through rural tourism and handicrafts; (3) infrastructure and service improvements; (4) environmental

sustainability programs; and (5) empowerment of women and youth.

4.2 Challenges

Challenges include: (1) water scarcity and climate variability; (2) limited non-agricultural job opportunities; (3) inadequate marketing channels; (4) social norms limiting participation; (5) weak technological adoption; and (6) fragmented institutional coordination.

4.3 Proposed Solutions

Proposed solutions focus on: modern irrigation techniques; promotion of e-commerce for rural products; improved transportation and healthcare; environmental conservation initiatives; microfinance schemes; and targeted capacity-building programs.

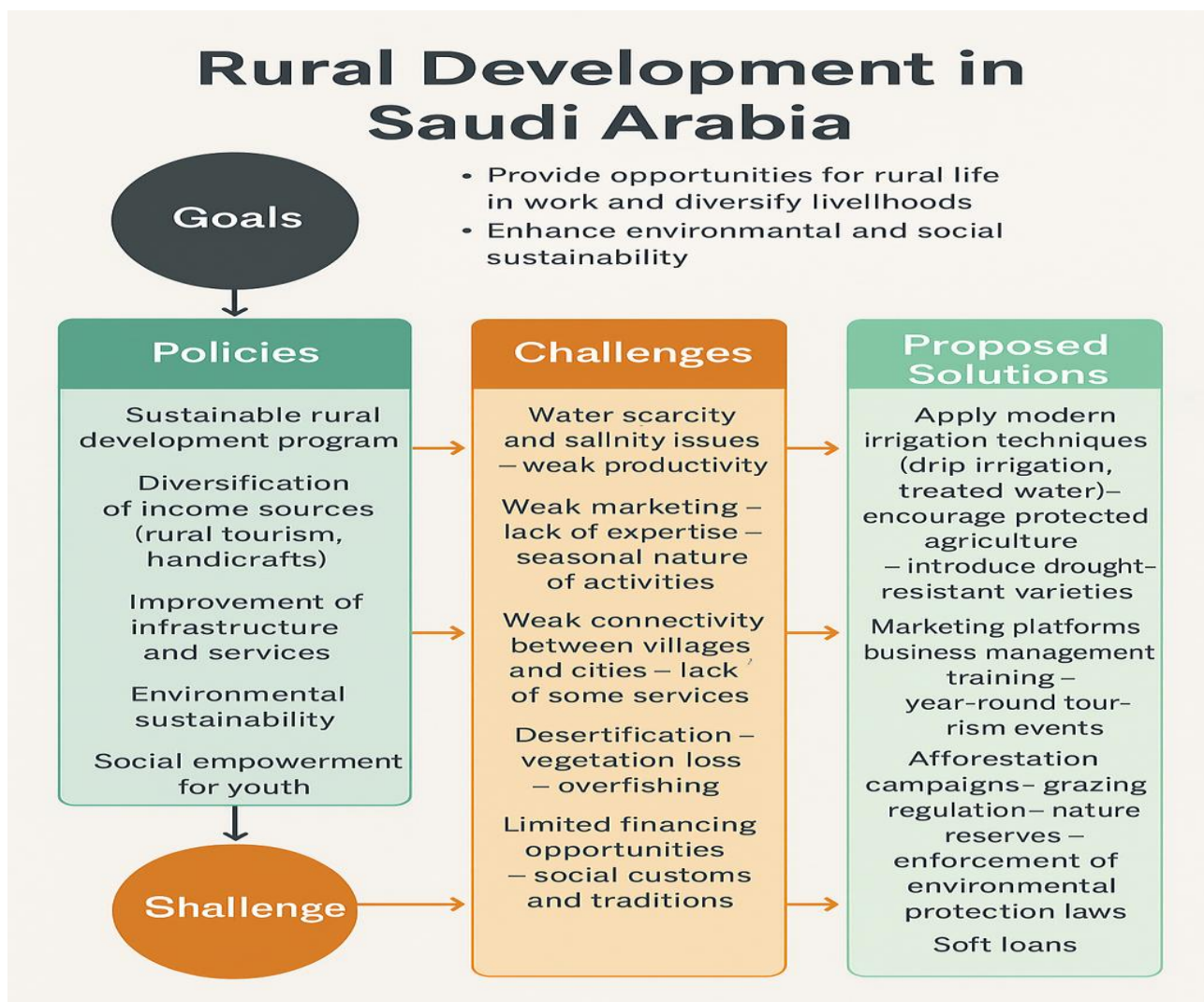


Figure 2: Proposed Rural Development in Saudi Arabia

5. Strategic Spatial Interpretation of Rural Development in Saudi Arabia

Longer be interpreted as a sectoral agricultural policy but rather as a process of **Strategic Spatial Development Planning** that reorganizes rural territories within the broader national spatial structure envisioned by Vision 2030. This represents a fundamental transition from traditional rural development approaches, which focused primarily on agricultural production and subsidy programs, toward an integrated spatial model that simultaneously addresses economic competitiveness, environmental sustainability,

infrastructure provision, social inclusion, and regional connectivity.

From a strategic spatial planning perspective, the REEF Program and related initiatives function not merely as agricultural support mechanisms but as spatial development instruments designed to activate the endogenous potential of rural regions according to their comparative territorial advantages. Coffee production in Jazan, rural tourism in Al-Ahsa, beekeeping, traditional handicrafts, and environmentally adapted agriculture illustrate how local resources become strategic assets capable of restructuring regional economies and reducing

spatial disparities. This interpretation is consistent with place-based development theories that advocate territorial specialization rather than standardized national development models.

The challenges identified in this study further reinforce the spatial nature of rural development. Water scarcity, climate variability, fragmented institutional coordination, inadequate market accessibility, and uneven technological adoption are not isolated sectoral problems; rather, they represent interconnected spatial constraints that influence the competitiveness and resilience of rural territories. Consequently, the effectiveness of rural policy depends less on individual sectoral interventions than on the capacity to coordinate investments across infrastructure, environmental management, economic diversification, and public services within an integrated territorial framework.

The analysis also reveals that rural development in Saudi Arabia increasingly depends on strengthening functional linkages between rural settlements and urban growth centers. Rural areas should therefore be considered active components of regional development systems rather than peripheral production zones. Improved transportation networks, digital infrastructure, logistics systems, and value-chain integration enhance flows of people, goods, knowledge, and investment between rural and urban areas, thereby creating mutually reinforcing patterns of regional development. Such spatial integration represents one of the central principles of contemporary strategic spatial planning.

Another important implication concerns governance. International experiences consistently demonstrate that successful rural transformation depends upon multi-level governance and institutional

coordination rather than isolated sectoral planning. The persistence of fragmented implementation identified in this study suggests that future rural policies should adopt integrated spatial governance mechanisms capable of coordinating national ministries, regional authorities, municipalities, and local communities. Such governance structures would improve policy coherence while allowing development priorities to reflect the distinctive characteristics of individual rural regions.

From a theoretical perspective, the findings support the proposition that rural development is fundamentally a process of territorial transformation rather than agricultural modernization alone. Strategic spatial development planning provides a more comprehensive analytical framework because it simultaneously incorporates spatial organization, regional competitiveness, environmental resilience, institutional governance, and social inclusion. Accordingly, the proposed solutions should be interpreted not as separate policy recommendations but as interdependent spatial interventions whose collective effectiveness depends upon their integration within a unified regional development strategy.

Ultimately, the evidence indicates that achieving Vision 2030 requires moving beyond sector-specific rural policies toward a national spatial development model in which rural regions become productive, resilient, and interconnected territorial systems. Such a transformation would not only enhance rural livelihoods but would also strengthen national territorial cohesion, reduce regional inequalities, improve environmental sustainability, and reinforce the long-term competitiveness of Saudi Arabia's regional economy.

Figure 3. Strategic Spatial Development Framework for Rural Development in Saudi Arabia

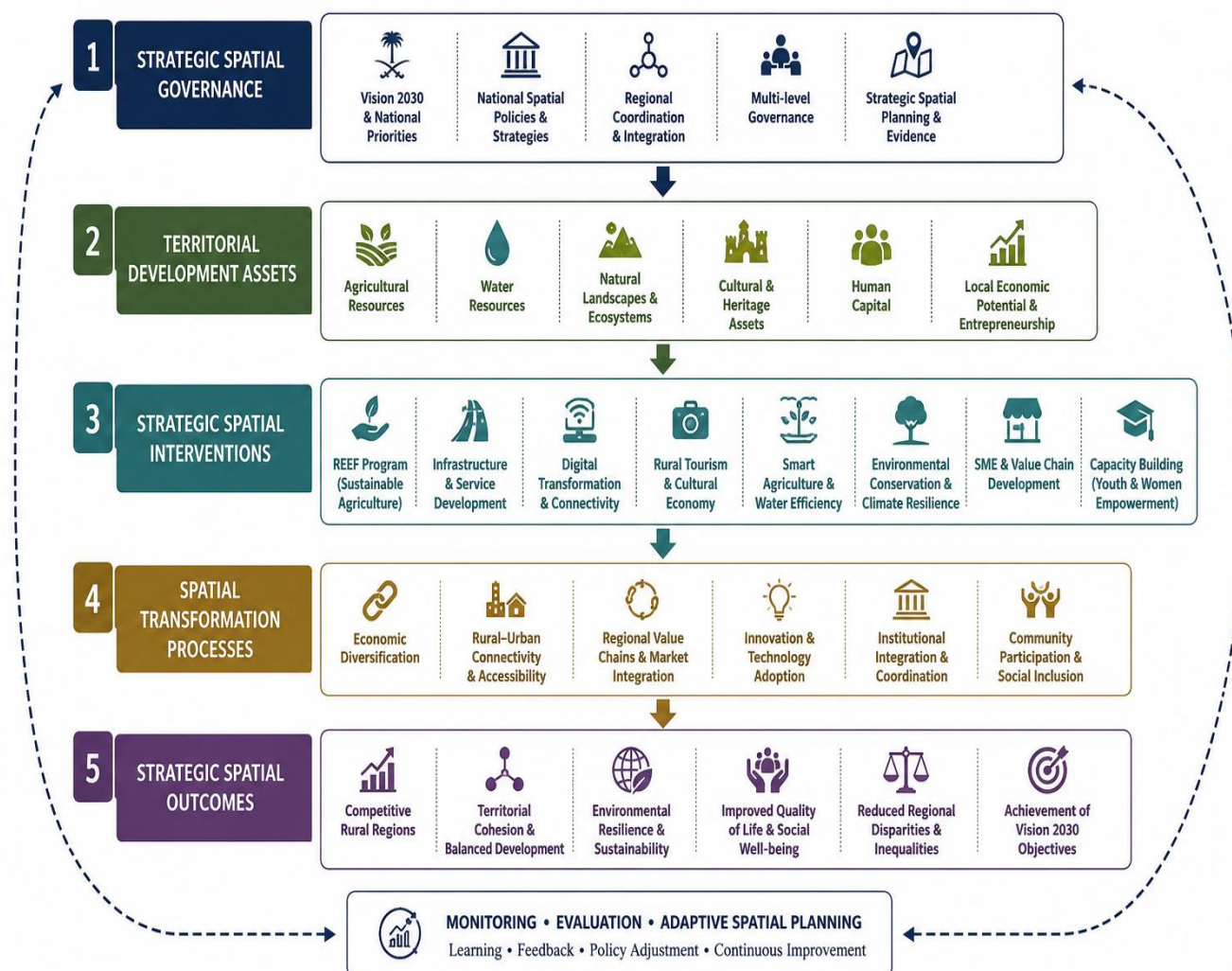


Figure 3. Strategic Spatial Development Framework for Rural Development in Saudi Arabia

Framework for Rural Development in Saudi Arabia. The framework conceptualizes rural development as a sequential and integrated spatial transformation process rather than a collection of independent sectoral policies. It begins with strategic spatial governance, which establishes the institutional and policy environment aligned with Vision 2030, followed by the identification of territorial development assets that constitute the endogenous resources of rural regions. These assets are activated through strategic spatial interventions, including infrastructure investment, digital transformation,

sustainable agriculture, environmental conservation, rural tourism, and local capacity building. The interaction among these interventions generates a series of spatial transformation processes, such as economic diversification, rural–urban connectivity, regional value-chain integration, technological adoption, institutional coordination, and community participation. These processes collectively produce strategic spatial outcomes characterized by competitive rural regions, territorial cohesion, environmental resilience, improved quality of life, and balanced regional development. The feedback

loop incorporated into the framework emphasizes that strategic spatial development is a continuous adaptive planning process based on monitoring, evaluation, policy learning, and institutional adjustment, thereby ensuring the long-term sustainability and resilience of rural development under the objectives of Saudi Vision 2030.

6. Conclusion and Recommendations

This study demonstrates that rural development in Saudi Arabia is undergoing a fundamental transformation from a predominantly sector-based agricultural policy toward a comprehensive model of **Strategic Spatial Development Planning**. The analysis indicates that the effectiveness of rural development no longer depends solely on agricultural investment or financial support programs but increasingly on the integration of spatial governance, territorial assets, infrastructure, environmental sustainability, digital transformation, and institutional coordination within a unified regional development framework.

The proposed **Strategic Spatial Development Framework** represents the principal theoretical contribution of this study. It conceptualizes rural development as a dynamic process of territorial transformation in which endogenous regional resources are activated through coordinated spatial interventions, generating economic diversification, rural–urban integration, environmental resilience, and balanced regional development. This framework extends existing rural development literature by introducing a spatial planning perspective that integrates economic, environmental, institutional, and social dimensions into a coherent analytical model.

From a policy perspective, the findings suggest that future rural development strategies in Saudi Arabia should prioritize place-based planning, strengthen multi-level governance, improve inter-agency coordination, expand digital and transport connectivity, and promote locally driven economic specialization. Such an integrated approach would enhance the resilience and competitiveness of rural regions while contributing directly to the objectives of Saudi Vision 2030.

Future research should move beyond descriptive policy analysis toward empirical spatial evaluation of rural transformation. Quantitative assessment of regional competitiveness, accessibility, territorial cohesion, spatial resilience, and the long-term impacts of major rural development programs will provide stronger evidence for evaluating the effectiveness of strategic spatial planning policies across different regions of Saudi Arabia.

Overall, this study argues that the future of rural development lies not in isolated sectoral interventions but in adopting a strategic spatial development paradigm capable of transforming rural territories into resilient, competitive, and interconnected regional systems that contribute to sustainable national development.

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