

# Leveraging Ecological Culture for Business Innovation in Rural Landscape Conservation and Economic Growth

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## Abstract

The incorporation of ecological culture into business innovation is increasingly recognised as transformative in promoting the preservation of rural landscapes and stimulating economic development. Environmental issues—such as the contamination of water sources, degradation of soil quality, and air pollution—alongside socio-economic barriers, often hinder business initiatives at the grassroots level. Consequently, ecological culture emerges as a critical strategy for advancing sustainable economic practices in rural settings. This research investigates the influence of ecological culture on driving innovation in rural business contexts. It further evaluates the economic outcomes associated with embedding ecological principles into the conservation of rural landscapes, and critically analyses both the obstacles and prospects linked to the adoption of ecological culture-oriented business models aimed at fostering rural economic advancement. A systematic literature review (SLR) approach was adopted, synthesising existing academic contributions to examine the interrelationship among ecological culture, rural business innovation, and economic growth. The analysis centred on scholarly journal articles, conference proceedings, and academic publications released post-2017, utilising a set of pre-established keywords

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alongside specific inclusion and exclusion criteria to ensure relevance and rigour. The results reveal that ecological culture contributes positively to sustainable economic strategies by facilitating the development of sectors such as agribusiness, eco-tourism, and strategic landscape planning. Despite notable impediments—primarily financial and technological limitations—the study identifies significant potential for ecological advancements within rural economies. The integration of ecological culture into rural business operations presents a viable route to achieving sustainable economic development while concurrently safeguarding environmental and cultural heritage. Addressing current limitations through supportive policy frameworks and active community involvement can pave the way for unlocking further economic opportunities in rural contexts.

**Keywords:** Ecological Culture, Economic Growth, Business Innovation, Rural Landscape Conservation

## Introduction

The incorporation of ecological culture into business innovation constitutes a promising avenue for the preservation of rural landscapes and the advancement of economic development. Rooted in the principle of fostering a harmonious coexistence between human activity and the natural environment, ecological culture underpins sustainable business approaches that safeguard natural resources while stimulating economic growth. Recent studies have increasingly highlighted the vulnerability of agricultural sectors in rural regions to environmental degradation, exacerbated by ecological deterioration, economic instability, and evolving socio-cultural dynamics ([Oliinyk et al., 2020](#)). Consequently, ecological culture offers a framework through which organisational challenges may be addressed, simultaneously fostering environmentally sustainable and economically feasible alternatives. This dual benefit has supported both the conservation and productivity of rural landscapes, where economic vitality becomes interlinked with the safeguarding of national cultural heritage ([Iannucci et al., 2021](#)).

Rural environments possess considerable potential for the implementation of ecologically based cultural strategies, given their typically rich biodiversity and deep-rooted cultural heritage. However, these assets face significant risks due to urban encroachment, intensified agricultural practices, and the expansion of industrial activities. Such developments threaten traditional ecosystems, including those founded on Indigenous knowledge and artistic traditions. Accordingly, the adoption of ecologically sensitive and culturally informed business models is posited as a sustainable means of enhancing the long-term economic prospects of rural communities ([Havadi-Nagy & Usai, 2017](#)). One notable form of innovation within this context is the development of eco-tourism, which capitalises on the aesthetic and cultural value of rural landscapes to generate economic returns. Eco-tourism presents an opportunity to both elevate local enterprise and promote environmental stewardship. By positioning natural and cultural assets as the foundation

for tourism-driven income generation, rural enterprises may benefit economically while contributing to ecological preservation. Such strategies also enhance employment opportunities and reinforce regional identity (Oliinyk et al., 2020).

Additionally, strategic landscape planning plays a fundamental role in rural development initiatives. The implementation of green infrastructure, such as ecological corridors or greenways, facilitates the sustainable enhancement of agricultural and natural spaces. Effective landscape planning necessitates a comprehensive understanding of ecological variables and socio-economic conditions, enabling informed decision-making for sustainable land use and rural productivity (Melicher & Špulerová, 2022). Through the careful analysis of rural socio-ecological systems, businesses are better equipped to devise strategies that reconcile environmental conservation with economic gain, ensuring responsible resource utilisation. The revitalisation of rural regions is frequently linked to the integration of commercial ventures with the conservation of ecological and cultural resources. Agricultural practices remain central to this vision, particularly those aligned with ecological principles and sustainability goals. It is imperative, therefore, that agriculturalists, business leaders, governmental authorities, and policymakers commit to development models that embed ecological responsibility, as emphasised by Lloret et al. (2024). The adoption of ecologically oriented designs, such as regenerative farming and sustainable tourism, enables the emergence of innovative market offerings while contributing to rural landscape conservation.

Furthermore, scholarly evidence suggests significant potential in aligning ecological cultural values with Western commercial practices. From the standpoint of environmental services and cultural heritage preservation, firms can access new market segments by offering products and services that are both innovative and culturally sustainable (Yin & Zhao, 2024). Rural enterprises, in particular, can create added value through the implementation of sustainable land management practices and the rehabilitation of environmentally degraded areas (Shakya & Vagnarelli, 2024). Achieving sustainable rural development entails recognising and balancing the complex interrelations among economic systems, ecological processes, and human societies. As such, business models that incorporate ecological cultural awareness must pursue equilibrium across these domains to ensure the resilience and continuity of rural enterprises amidst environmental and economic uncertainties. This holistic alignment with ecological sustainability enables rural businesses to achieve financial viability while fostering community cohesion and cultural preservation (Iannucci et al., 2021).

### Problem Statement

The integration of ecological culture into business innovation—particularly within the context of rural landscape conservation—presents a range of complexities. A primary limitation arises from the inadequate implementation of overarching objectives that aim to harmonise ecological, cultural, and economic values in territorial management. As noted by Zhang (2020), agricultural and land-use practices in rural areas have increasingly

transitioned from traditional methodologies to industrialised systems, a shift which has contributed to environmental degradation and the erosion of cultural traditions. Additionally, the intensifying pressures of urban expansion and the demands of the global economy often take precedence over biodiversity conservation and sustainable development imperatives. This dynamic, as observed by [Vermunt et al. \(2020\)](#), further complicates the reconciliation of ecological sustainability with economic priorities. The resultant tension between socio-economic advancement and environmental stewardship continues to pose a substantial obstacle to fostering innovative business models in rural regions. Moreover, the inhabitants of these areas frequently encounter challenges in maintaining their cultural heritage while simultaneously striving to meet contemporary economic expectations. As [Lennon and Barrett \(2024\)](#) contend, this dual burden significantly affects the capacity of local communities to balance cultural preservation with the imperatives of development, thereby limiting the effective integration of ecological culture within rural economic systems.

### Research Objectives

- To explore the role of ecological culture in fostering business innovation in rural landscapes
- To examine the economic impacts of integrating ecological culture into rural landscape conservation practices
- To assess the challenges and opportunities in implementing ecological culture-driven business innovations for rural economic growth

The integration of ecological culture into business innovation serves as a foundational element for stimulating economic development within rural regions. As rural territories increasingly encounter multifaceted pressures—such as urban expansion, the intensification of agriculture, and various environmental challenges—there remains substantial potential for fostering long-term business sustainability while concurrently cultivating ecological values. According to [Swaffield et al. \(2019\)](#), such innovations not only contribute to the preservation of cultural and ecological diversity but also facilitate the growth of rural economies by generating new market opportunities. Moreover, growing consumer awareness regarding the sustainability of natural resources underscores the imperative for businesses to incorporate sustainable practices into their operational frameworks, as emphasised by [Shakya and Vagnarelli \(2024\)](#). This shift in consumer expectations provides a strategic avenue to strengthen the resilience of rural areas, enhance economic performance, and ensure the responsible utilisation of ecosystem services, as noted by [Xiang and Xu \(2021\)](#). The present study contributes to this discourse by applying foundational principles of sustainable resource management to business decision-making in rural settings. In doing so, it aims to offer practical insights for policymakers and entrepreneurs seeking to effect meaningful change that simultaneously supports ecological integrity and economic advancement.

## Literature Review

### Ecological Culture in Fostering Business Innovation in Rural Landscapes

The role of ecological culture in fostering business advancement within rural contexts has become increasingly significant, particularly in regions grappling with ecological degradation and socio-economic instability. The integration of ecological culture into organisational practices promotes the adoption of sustainable measures while simultaneously enhancing ecosystem quality, thereby laying the groundwork for economically viable and environmentally responsible business strategies, as suggested by [Swaffield et al. \(2019\)](#). This concept is particularly relevant in sectors such as agriculture, where innovation in both business models and farming techniques can expand habitats, enrich soil and water quality, and, in the long term, support economic growth through sustainable food production. Research in landscape design advocates for the application of ecological principles by rural enterprises, highlighting dual benefits for both environmental conservation and business sustainability, as highlighted by [Zhang \(2024\)](#). Enterprises capitalising on eco-tourism demonstrate this alignment by leveraging the cultural and ecological assets of rural areas to generate economic value. In nations such as Italy, for example, historic and culturally significant regions have been integrated into strategies for sustainable tourism development, as discussed by [Shakya and Vagnarelli \(2024\)](#). Agricultural models such as permaculture, which combine ecological restoration with business objectives, are particularly impactful in ecosystems previously degraded by intensive farming practices, as noted by [Oliveira and Penha-Lopes \(2020\)](#).

Extensive rural territories present favourable conditions for the experimentation of ecological design concepts rooted in regional traditions. Preserving historical land-use practices while adopting modern productivity measures is vital to ensuring long-term sustainable development, particularly in the face of climate change and the pressures of global economic liberalisation, as emphasised by [Maheshwari and Priyesh Shah \(2019\)](#). A practical case of ecological culture in action is exemplified by Patagonia, a company that addresses environmental challenges through its core business ethos. As [O'Rourke and Strand \(2017\)](#) explain, Patagonia's 'Worn Wear' initiative encourages consumers to repair or purchase second-hand garments, thus promoting the use of recycled materials. The firm also allocates a portion of its profits to support environmental causes, demonstrating that ecological culture in the fashion industry can be both sustainable and financially rewarding. For the integration of ecological culture into innovation-driven business practices to be effective, it must reflect the values and priorities of the local community. As [Maldonado et al. \(2018\)](#) argue, community participation is essential in designing models that foster both economic growth and the conservation of environmental and cultural resources. According to [Dou et al. \(2019\)](#), incorporating context-specific knowledge into ecological planning can enhance the environmental compatibility of business operations while also improving the quality of life in rural communities. Firms that embed ecological culture within their frameworks are better positioned to address rural development

challenges by aligning environmental stewardship with economic objectives, as asserted by [Guarino et al. \(2017\)](#). Such an approach not only supports enduring economic viability but also safeguards the natural and cultural heritage that defines rural landscapes.

### **Economic Impacts of Integrating Ecological Culture into Rural Landscape**

The incorporation of ecological culture into landscape conservation strategies within rural settings offers both opportunities and inherent economic risks. Nevertheless, the literature indicates that such integration can significantly enhance local economies by aligning development initiatives with the intrinsic value of ecosystem services. These environmental functions—such as water purification, soil preservation, and biodiversity support—are increasingly recognised for their economic worth, as highlighted by [Lennon and Barrett \(2024\)](#). A notable strategy for supporting this integration is ecological landscape design, which serves as a catalyst for rural economic development. As [Long et al. \(2024\)](#) contend, embedding ecological culture into landscape planning enables a balance between preserving traditional land-use practices and promoting sustainable economic activities. Moreover, rural tourism emerges as a key avenue in this discourse. Cultural landscapes, when preserved and valorised, attract eco-tourism, thereby generating new entrepreneurial opportunities for rural communities, as demonstrated by [Arnaiz-Schmitz et al. \(2018\)](#). Further, adopting ecological culture as a guiding framework in rural area management may mitigate the encroachment of urban sprawl by maintaining both the aesthetic and functional integrity of rural environments. This approach not only protects landscapes from urban conversion but also fosters nature-based tourism and environmentally responsible agricultural production, as asserted by [Iannucci et al. \(2021\)](#).

The implementation of sustainable agricultural practices informed by ecological principles is critical in reducing rural economic vulnerability. Intensive agricultural methods often deplete the environmental resource base, whereas ecological land management—such as that practised in northern Spain—has proven effective in sustaining habitats and enhancing ecosystem services, as discussed by [Guadilla-Sáez et al. \(2019\)](#). In a similar vein, permaculture-based initiatives in Portugal exemplify how ecological values can drive rural economic restructuring. These bottom-up strategies, grounded in sustainable land use, simultaneously advance ecological sustainability and local economic empowerment by supporting community-driven enterprises, as observed by [Oliveira and Penha-Lopes \(2020\)](#).

Ecological culture also contributes to climate resilience in rural regions. Many rural landscapes face degradation due to climatic shifts; however, thoughtfully planned landscapes that integrate ecological and heritage considerations offer protection against such threats while bolstering economic outcomes. This strategic use of natural and cultural assets enables rural populations to adapt to environmental change more effectively. Lastly, the emergence of nature-value farming systems has further highlighted the economic relevance of landscape conservation. Such systems, increasingly appreciated in Spain for their role in biodiversity preservation and cultural heritage, have generated market interest

and tangible economic benefits for rural communities, as reported by [Schmitz et al. \(2021\)](#). By embedding cultural and ecological values within rural development frameworks, these practices contribute to a model of economic growth that is both desirable and sustainable.

### Challenges and Opportunities in Eco-Culture Business for Rural Growth

A prominent challenge in integrating ecological culture into rural business innovation lies in technological limitations. Many rural regions suffer from a lack of access to modern digital infrastructure, which significantly impedes their capacity to engage in contemporary business practices. As noted by [Nipo et al. \(2024\)](#), constraints such as inadequate digital connectivity, low levels of computer literacy, and insufficient digital support systems hinder the effective adoption of advanced tools such as e-commerce platforms, social media engagement, and other digital business solutions. As a result, rural enterprises often struggle to access broader markets and exhibit lower economic productivity than anticipated. Furthermore, a lack of technological proficiency obstructs the utilisation of essential innovations such as smart agriculture, renewable energy systems, and digital platforms critical for ecological business development ([Agarwal, 2020](#)).

Financial limitations represent another major barrier. Rural entrepreneurs frequently encounter difficulties in accessing capital, face heightened investment risks, and often operate in environments where funding mechanisms are both limited and bureaucratically cumbersome. [Beeravalli \(2017\)](#) asserts that eco-innovations, particularly in their initial phases, are typically capital-intensive, thereby placing them beyond the financial reach of small-scale rural businesses dependent on conventional revenue streams. In addition, current funding frameworks aimed at supporting rural enterprises are often fragmented and administratively complex, thereby undermining the encouragement of ecological enterprise development. Without targeted financial incentives or accessible micro-financing mechanisms, merely promoting sustainable business models is insufficient to drive meaningful adoption among rural entrepreneurs. Environmental constraints further exacerbate the challenges associated with implementing ecological business innovations. Rural enterprises are particularly vulnerable to the adverse effects of climate change, land degradation, and natural resource depletion. As [Karintseva et al. \(2021\)](#) explain, insufficient environmental regulation and preservation measures accelerate resource exhaustion, thereby undermining the long-term sustainability of businesses grounded in ecological principles.

Despite these limitations, several promising opportunities exist for advancing rural economies through ecological business innovations. One such avenue lies in tourism-based ecological ventures, which leverage the natural and cultural assets of rural areas to stimulate both tourism and local business activity. [Dinis \(2021\)](#) highlights how eco-tourism, cultural tourism, and other sustainable tourism forms have made significant contributions to the economies of sparsely populated regions. The creative industries also offer a fertile ground for merging ecological sustainability with cultural heritage. According to [Duxbury \(2021\)](#), creative entrepreneurship enables rural communities to derive economic value from

artistic and cultural resources. Initiatives such as the promotion of handmade goods, organic farming practices, and the development of renewable energy-based products offer significant potential to enhance rural economic activities while preserving environmental integrity.

Collaborative efforts with the private sector, supported by comprehensive policies, regulatory frameworks, and financial instruments, are crucial for enabling rural communities to engage in sustainable enterprise. Well-structured policies can facilitate effective resource management, promote climate change adaptation and mitigation, and support the development of innovative green business strategies, as emphasised by [Popa \(2024\)](#). The post-pandemic resilience of The Body Shop offers a compelling example of the benefits of embedding ecological culture within business operations. [Rahmiati and Pertiwi \(2022\)](#) highlight the company's socially responsible approach, particularly in areas related to environmental sustainability. The Body Shop's adoption of practices such as ethical sourcing and community engagement has not only enhanced its environmental impact but also reinforced its corporate sustainability. Their findings demonstrate that a coherent ecological culture within a business contributes to both environmental protection and long-term organisational viability.

### Literature Gap

Although substantial scholarly attention has been directed toward the application of ecological culture in fostering business innovation, there remains a notable deficiency in studies that concretely articulate the development of ecological culture-based business models within rural contexts. Existing literature predominantly emphasises the economic prospects of environmental culture through avenues such as sustainable tourism ([Shakya & Vagnarelli, 2024](#)), permaculture ([Oliveira & Penha-Lopes, 2020](#)), and high-nature value farming systems ([Schmitz et al., 2021](#)). Nevertheless, there is limited empirical insight into the specific challenges encountered by rural entrepreneurs, particularly regarding the substantial constraints and high initial costs associated with implementing such models. While the technological divide ([Nipo et al., 2024](#)) and financial limitations ([Beeravalli, 2017](#)) are recognised as critical impediments, scholarly discourse insufficiently addresses the role of policy interventions in mitigating these barriers and facilitating the transition towards ecological business models. Moreover, although the contributions of creative industries ([Duxbury, 2021](#)) and landscape conservation to rural economic development are acknowledged, their long-term economic effects remain largely unquantified. Climate change resilience is also identified as a pertinent concern ([Karintseva et al., 2021](#)); however, existing studies offer minimal exploration of adaptive strategies that businesses might employ to transform and sustain operations under shifting environmental conditions. Addressing these research gaps through longitudinal and policy-oriented investigations would substantially enhance the viability and integration of culture-based ecological innovations in rural economies.

## Methodology

### Research Methods and Design

This study adopted a qualitative research methodology, utilising a Systematic Literature Review (SLR) to achieve its research objectives. The rationale for selecting the SLR approach lies in its capacity to systematically collate and synthesise evidence from diverse scholarly sources concerning the role of ecological culture in promoting business innovation within rural contexts. Through the application of predefined search terms and inclusion criteria, relevant literature was identified, assessed for quality, and critically analysed. This methodological framework facilitated the identification of emergent economic themes, including the impacts, challenges, and opportunities associated with the integration of ecological culture into rural business practices.

### Data Collection Methods

#### Searching Technique

A comprehensive literature search was undertaken employing a set of predefined keywords aligned with the core themes of ecological culture, business innovation, and rural economic development. The search strategy incorporated terms such as “ecological culture,” “sustainable business,” “rural development,” “landscape conservation,” “tourism innovation,” and “agricultural practices” to capture literature pertinent to the study’s objectives. These keywords were carefully selected and refined to ensure that the sources reviewed directly addressed the research questions and maintained thematic relevance.

#### Databases

The literature search was conducted using several key databases, including JSTOR, Web of Science (WOS), Google Scholar, ResearchGate, and Scopus. These platforms were selected due to their extensive access to peer-reviewed articles, which provide valuable insights into business, environmental, and rural development research. The use of these databases ensured the retrieval of high-quality, relevant literature to support the research objectives.

#### Boolean Operators

Boolean operators (AND, OR, NOT) were employed to refine the search and obtain more precise results. For instance, the operator AND was used to combine terms like “ecological culture AND business innovation,” while OR expanded the search scope, such as in the case of “rural development OR economic growth.” The NOT operator was used to exclude irrelevant results, ensuring that only studies pertinent to the review’s objectives were included.

## Inclusion and Exclusion Criteria

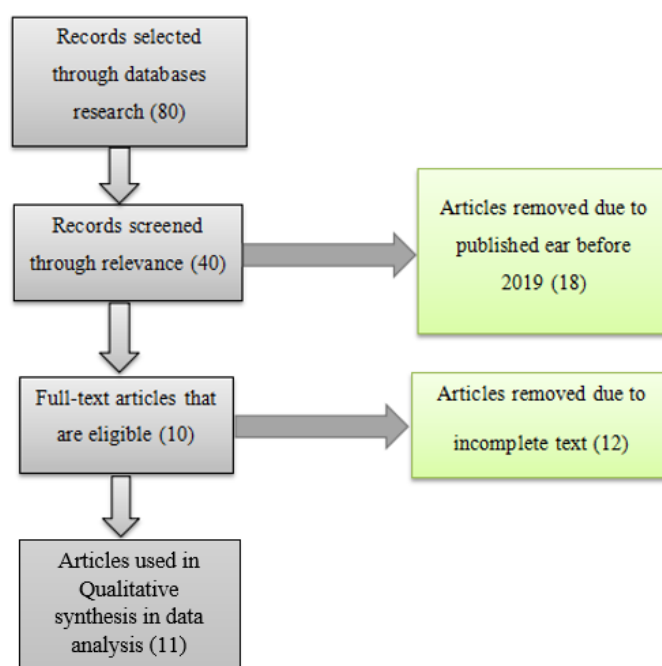
Inclusion and exclusion criteria were applied to filter the most relevant studies. These criteria are summarised in [Table 1](#).

**Table 1:** Inclusion and Exclusion Criteria

Criterion	Inclusion	Exclusion
Publications	Peer-reviewed journal articles, academic books, and conference papers after 2017	Articles not peer-reviewed, non-academic sources before 2017
Research Type	Empirical studies, conceptual papers, systematic reviews	Opinion pieces, news articles, unverified data
Language	English	Non-English publications
Focus	Ecological culture, rural business innovation, economic impacts	Irrelevant studies not focusing on ecological culture or business

## Selection of Paper through PRISMA Framework

The articles were selected based on the PRISMA flowchart, which outlines the items to be included in systematic reviews and meta-analyses. A total of eighty articles were initially selected from the electronic databases based on the inclusion and exclusion criteria. After carefully reviewing and comparing the abstracts and full texts, eleven papers were chosen for analysis ([Figure 1](#)). These papers provided the most relevant and comprehensive discussion aligned with the research objectives. The purposive sampling method was employed to ensure that only studies directly addressing the study's specific aims were included in the final analysis.



**Figure 1:** PRISMA Framework

## Data Analysis Methods

A thematic analysis was conducted to analyse the data collected through the SLR. Thematic analysis is an inductive approach that facilitates the identification of patterns and themes within the literature. The analysis followed the steps outlined in [Table 2](#).

**Table 2:** Data Analysis Methods

Step	Description
<b>Step 1: Data Familiarization</b>	Read through the selected articles to gain an overall understanding of the content.
<b>Step 2: Coding</b>	Develop initial codes based on the key themes and concepts related to ecological culture and business innovation.
<b>Step 3: Theme Development</b>	Group similar codes into broader themes that reflect the study's objectives.
<b>Step 4: Review Themes</b>	Review the themes to ensure they accurately represent the data and answer the research questions.
<b>Step 5: Interpretation</b>	Interpret the identified themes with the study's research objectives and conclude.

## Ethical Considerations

Ethical considerations were carefully observed throughout the study. All sources cited in this work were properly referenced, ensuring the respect of the authors' intellectual property rights. The ethical guidelines of academic research were strictly followed, with only published papers used. Additionally, the data presented were reported in a fair and accurate manner, maintaining the integrity of the research process.

## Results

This section systematically presents the data gathered in this study, including the implications associated with each of the research objectives. [Table 3](#) outlines the themes derived for data analysis through NVivo Software, which was employed to analyse the collected data.

**Table 3:** Themes Extracted

Themes	Description
<b>Ecological Culture and Business Innovation</b>	It focuses on integrating ecological principles into business models and how this fosters innovation in rural landscapes, promoting sustainability and economic growth.
<b>Sustainable Agricultural Practices</b>	Examines how ecological culture influences farming practices in rural areas, including sustainable agriculture and permaculture, which help conserve resources and enhance productivity.

Table 3 (continued): Themes Extracted

Themes	Description
<b>Economic Growth Through Eco-Tourism</b>	Investigates the economic opportunities in rural areas through Eco-tourism and sustainable tourism, which utilize the natural and cultural resources of the land to create profitable ventures.
<b>Impact of Ecological Landscape Design</b>	Describes how applying ecological principles to landscape design can lead to better environmental management and enhanced rural economic development through improved agricultural production and tourism.
<b>Environmental and Cultural Preservation</b>	Focuses on preserving rural areas' environment and cultural heritage through business practices that embrace ecological culture, ensuring long-term sustainability and identity retention.
<b>Barriers to Implementing Ecological Innovations</b>	Identifies rural businesses' challenges in adopting ecological culture-driven practices, including technological, financial, and infrastructure limitations.
<b>Opportunities in Rural Economic Development</b>	Explores the opportunities for rural economic growth through innovations driven by ecological culture, including new markets, products, and services that align with sustainability goals.
<b>Policy and Institutional Support</b>	Examines the role of government and institutional policies in supporting the adoption of ecological business models, including funding mechanisms, regulations, and infrastructure development.
<b>Community Engagement in Ecological Business</b>	It focuses on the involvement of local communities in the implementation of ecological business practices, ensuring that these practices are culturally relevant and beneficial for the welfare of rural populations.
<b>Climate Change Adaptation</b>	Investigate how ecological culture can help rural areas adapt to climate change by promoting sustainable practices that mitigate environmental risks and promote resilience.

[Surya et al. \(2021\)](#) conducted a literature review on the role of agribusiness in rural development, particularly within agropolitan areas. Their research suggests that integrating sustainable environmental management with agribusiness generates income-creating employment opportunities. They argue that sustainable environmental practices are crucial for the economic growth of rural regions, as they enhance agricultural productivity, create employment, and foster a sustainable environment. This paper highlights that agropolitan development is vital for the economic progress of rural areas through agribusiness initiatives. In a similar vein, [Enquist and Sebhatu \(2021\)](#) examine IKEA's commitment to the circular economy and sustainability. Their analysis underscores IKEA's efforts to incorporate sustainable materials, encourage recycling, and minimise waste. The authors conclude that IKEA's "People & Planet Positive" strategy successfully

aligns eco-friendly practices with business growth, thereby ensuring both long-term environmental sustainability and economic opportunities (Table 4).

**Table 4:** Ecological Culture and Business Innovation

Authors	Objectives	Methods	Findings	Conclusion
Surya et al. (2021)	To explore the role of agribusiness in rural development, focusing on the development of agropolitan areas and their environmental management sustainability for regional economic growth.	An empirical study uses case studies from several agropolitan regions, economic growth metrics, and sustainability indicators.	When integrated with sustainable environmental management, agribusinesses make significant contributions to regional economic growth by creating jobs, enhancing agricultural productivity, and promoting environmental sustainability in rural areas.	Concluded that agropolitan development is crucial for regional economic growth in rural areas, with agribusiness acting as a central driver for environmental sustainability and economic growth.
Enquist and Sebhatu (2021)	To explore IKEA's commitment to the circular economy and its values-based sustainability business practice, with a focus on its People & Planet Positive initiative.	Case Study Analysis and Sustainability Framework Assessment of IKEA's Circular Economy Strategies.	IKEA's circular economy initiatives, including the use of sustainable materials, promoting product recycling, and reducing waste, align with its values of sustainability and responsibility.	IKEA's commitment to the circular economy and values-based sustainability demonstrates how businesses can adopt eco-friendly practices and still drive growth. Their People & Planet Positive strategy is integral to their business model, ensuring environmental sustainability and creating long-term economic opportunities.

McLennon et al. (2021) explore regenerative agriculture and permaculture as potential solutions to the challenges in global food production and food insecurity. Their research highlights the positive effects of these practices on soil health, water resources, and biodiversity, enabling high crop yields without causing resource depletion. The authors conclude that regenerative agriculture and permaculture are key components of sustainable agricultural practices, which contribute to improving food security and promoting ecological culture within rural businesses (Table 5).

**Table 5:** Sustainable Agricultural Practices

Authors	Objectives	Methods	Findings	Conclusion
McLennon et al. (2021)	To explore the role of regenerative agriculture and integrative permaculture in fostering sustainable food production and improving global food security through ecological culture.	An empirical study uses case studies, field trials, and surveys to examine the impact of regenerative agriculture and permaculture practices in diverse agricultural systems.	It was found that regenerative agriculture and permaculture significantly enhance soil health, water conservation, and biodiversity, increasing agricultural productivity while conserving natural resources.	Concluded that regenerative agriculture and permaculture practices are essential for ensuring sustainable agricultural production, contributing to food security, and promoting ecological culture in rural business practices.

**Table 6:** Economic Growth through Eco-Tourism

Authors	Objectives	Methods	Findings	Conclusion
Litheko (2021)	To explore how small tourism businesses in Mahikeng, South Africa, utilize eco-tourism to foster growth, sustainability, and economic opportunities in rural areas.	Empirical study based on survey data from small eco-tourism businesses, interviews with local stakeholders, and analysis of regional business growth.	Found that eco-tourism has significantly contributed to the growth of small businesses in Mahikeng by leveraging local natural and cultural resources, creating job opportunities, and increasing local revenue.	Eco-tourism offers substantial economic benefits for rural areas and tiny businesses by promoting sustainability, increasing economic diversification, and providing growth opportunities in rural communities.

[Litheko \(2021\)](#) examines how small eco-tourism ventures can stimulate growth in the Mahikeng area of South Africa. The study highlights that promoting eco-tourism can support the growth of small businesses by leveraging the region’s natural and cultural resources, creating employment opportunities, and generating income. The author argues that eco-tourism offers significant benefits for rural areas, particularly in terms of its positive economic impacts, which include fostering the development of both the local economy and small businesses ([Table 6](#)).

[Melicher and Špulerová \(2022\)](#) investigate the role of landscape-ecological principles in greenway planning for rural economic development. Their study demonstrates that the integration of ecological concepts into agricultural and rural land design enhances productivity, supports species conservation, and fosters eco-tourism, thereby stimulating economic growth. The authors argue that landscape-ecological design, particularly through the implementation of greenways, plays a crucial role in advancing the rural economy by promoting environmental conservation, production, and diverse tourism opportunities ([Table 7](#)).

**Table 7:** Impact of Ecological Landscape Design

Authors	Objectives	Methods	Findings	Conclusion
<a href="#">Melicher and Špulerová (2022)</a>	To investigate how applying landscape-ecological principles in greenway planning can enhance rural economic development through improved agricultural productivity and eco-tourism.	Case study analysis and spatial planning methods applied to rural agricultural landscapes, focusing on greenway design and ecosystem services.	Greenway planning, which integrates ecological principles into landscape design, significantly boosts agricultural productivity, biodiversity conservation, and eco-tourism in rural areas, leading to overall economic growth.	Landscape-ecological design, particularly greenways, plays a vital role in sustainable rural economic development by combining environmental management with agricultural and tourism benefits.

[Cerquetti et al. \(2022\)](#) evaluate the influence of cultural elements, such as local food and wine tourism, on sustainable development and the preservation of cultural identity in rural areas. Their study reveals that promoting such heritage contributes to the maintenance of cultural self-identity, fosters sustainable tourism, and supports the local economy. The authors argue that cultural tourism should incorporate intangible cultural heritage to promote a sustainable rural environment and safeguard cultural preservation ([Table 8](#)).

**Table 8:** Environmental and Cultural Preservation

Authors	Objectives	Methods	Findings	Conclusion
<a href="#">Cerquetti et al. (2022)</a>	To examine how intangible cultural heritage can be leveraged to promote sustainable tourism and preserve cultural and environmental identity in rural areas.	Case study on the “Marche food and wine memories” project in Italy, using qualitative interviews with stakeholders and tourism impact assessments.	Found that promoting intangible cultural heritage, such as local food and wine traditions, enhances the cultural identity of rural areas while fostering sustainable tourism and supporting local businesses.	Concluded that intangible cultural heritage is essential for sustainable tourism development, as it strengthens local cultural identity and ensures long-term environmental and cultural preservation in rural communities.

**Table 9:** Barriers to Implementing Ecological Innovations

Authors	Objectives	Methods	Findings	Conclusion
<a href="#">Hmamed et al. (2024)</a>	To explore the adoption of Industry 4.0 (I4.0) technologies and their integration into circular supply chains, focusing on the barriers to adoption and implementation in the textile sector.	Structural Equation Modelling (SEM) analysis based on industry surveys from textile sector businesses to assess technology adoption challenges and barriers.	Found that barriers to adopting I4.0 technologies in sustainable supply chains include technological challenges, financial constraints, and lack of infrastructure, especially for small businesses in rural areas.	Concluded that the successful adoption of Industry 4.0 technologies requires overcoming these barriers through better infrastructure, financing solutions, and technology adaptation, crucial for ensuring sustainability in rural businesses.

Hmamed et al. (2024) examine the barriers to adopting Industry 4.0 (I4.0) technologies in the textile sector, with a particular focus on their integration into sustainable supply chains. The study identifies technological challenges, financial limitations, and insufficient infrastructure as major obstacles, especially for small rural businesses. The authors conclude that addressing these barriers through enhanced infrastructure, innovative financing solutions, and technology adaptation is crucial for ensuring the sustainability of rural enterprises (Table 9).

Choudhury and Shaw (2024) conducted a study on social innovation for sustainable rural development in India, with a focus on ecological culture-based innovation. The research highlights that social innovation creates new markets, products, and services, thus fostering the growth of the rural economy within the framework of sustainability. The authors assert that innovative approaches in areas such as farming, water management, and gender equality can significantly enhance the status of rural areas, offering a range of economic opportunities for local populations (Table 10).

Table 10: Opportunities in Rural Economic

Authors	Objectives	Methods	Findings	Conclusion
Choudhury and Shaw (2024)	To explore social innovation and its role in sustainable rural development in India, focusing on how innovations driven by ecological culture can promote rural resilience.	Qualitative research using case studies and interviews with local stakeholders in rural areas of India, analysing social innovation strategies.	Found that social innovation, driven by ecological culture, can create new markets, products, and services that contribute to rural economic growth while aligning with sustainability goals.	Concluded that social innovations focused on agriculture, water management, and gender can enhance rural resilience and provide significant economic opportunities, contributing to sustainable rural

Song et al. (2024) explore the roles of policies, markets, and the private sector in facilitating the transition to sustainable energy and the development of suitable sustainable business models. The study highlights that these factors play a crucial role in promoting sustainable practices. The authors recommend that governments implement policy incentives and decriminalise the market to ensure that sustainable business models and product designs gain recognition in rural areas (Table 11).

Table 11: Policy and Institutional Support

Authors	Objectives	Methods	Findings	Conclusion
<a href="#">Song et al. (2024)</a>	To explore policy and market mechanisms that promote the sustainable energy transition, focusing on the role of government and private sector in supporting sustainable business models.	Empirical study using case studies, policy analysis, and interviews with government and industry stakeholders in the energy sector.	Found that government policies, market mechanisms, and private sector involvement are critical for promoting the transition to sustainable energy and fostering business models that align with sustainability goals.	Concluded that a coordinated approach involving government policies, private sector participation, and market incentives is essential for promoting the adoption of sustainable business models, which could be applied to broader ecological business practices in rural areas.

Table 12: Community Engagement in Ecological Business

Authors	Objectives	Methods	Findings	Conclusion
<a href="#">Subramaniam (2024)</a>	To examine the role of ecological networks and community attachment in supporting indigenous entrepreneurs and fostering sustainable ecological business models in rural areas.	Doctoral dissertation utilizing qualitative interviews, surveys, and case studies involving indigenous entrepreneurs and local communities in rural settings.	Found that community attachment and the establishment of ecological networks are key factors in ensuring the success of sustainable business models. Indigenous entrepreneurs who involve local communities in ecological practices benefit from stronger support networks and greater cultural relevance.	Community engagement is critical for sustainable ecological business models, mainly when cultural relevance and local involvement are prioritized, ensuring long-term success and a positive impact on rural populations.

[Subramaniam \(2024\)](#) investigates the role of ecological networks and community involvement in developing ecological investments for indigenous enterprises and ecological businesses. The study provides evidence that local participation in

ecological matters promotes support structures and cultural alignment, thereby contributing to the success of these businesses. The author concludes that community-based ecological business models should be prioritised for smallholder farmers, as they foster sustainable development and lead to the success of business ventures, ultimately benefiting the rural population (Table 12).

Viñals et al. (2023) review the role of agroforestry systems in enhancing social-ecological resilience to climate change. The study demonstrates that these systems improve biodiversity, soil health, and carbon sequestration, thereby playing a crucial role in climate change adaptation and boosting the resilience of rural communities. The authors conclude that when integrated with ecological culture, agroforestry represents a highly effective strategy for fostering climate resilience, ensuring environmental sustainability, and promoting economic viability in rural areas (Table 13).

Table 13: Climate Change Adaptation

Authors	Objectives	Methods	Findings	Conclusion
Viñals et al. (2023)	To review social-ecological resilience in agroforestry systems and how these systems can help mitigate the effects of climate change in rural areas by promoting sustainable practices.	A systematic review of existing agroforestry systems research focuses on their role in building climate resilience and sustainability in rural landscapes.	It was found that agroforestry systems, as part of social-ecological resilience, significantly contribute to climate change adaptation by increasing biodiversity, soil health, and carbon sequestration while improving the resilience of rural communities to climate impacts.	Concluded that agroforestry, integrated with ecological culture, can be a highly effective strategy for promoting climate resilience in rural areas, ensuring long-term environmental sustainability and economic viability.

Discussion

Interpretation of the Findings

Role of Ecological Culture in Fostering Business Innovation

The results indicate that businesses adopting ecological culture models create significant innovation opportunities for rural regions. Such businesses in rural

areas foster innovation by integrating sustainability practices, particularly through eco-tourism and sustainable agriculture initiatives. This leads to diversified revenue streams, expanded market presence, and the establishment of sustainability-driven business approaches. The analysis highlights that companies engaged in ecological culture conservation attain sustainable economic development by attracting environmentally conscious consumers and financial partners.

### **Economic Impacts of Integrating Ecological Culture into Rural Landscape**

The findings thus confirm that integrating ecological culture positively impacts the economic landscape. Environmentally sustainable agricultural production is achievable, and preserving the ecology of an area can coexist with the creation of new economic opportunities. For example, regenerative agriculture and permaculture not only enhance productivity but also facilitate ecological succession, benefiting both the farmer and the environment. Furthermore, eco-tourism serves as a catalyst for local economic growth, as tourists support local industries while underscoring the importance of conserving cultural and natural heritage sites.

### **Challenges and Opportunities in Implementing Ecological Culture-Driven Business Innovations**

The results highlight strategic challenges hindering ecological culture-driven innovations, such as financial constraints, technological limitations, and infrastructural deficiencies. However, these obstacles also present opportunities for policy intervention and community engagement. Despite these challenges, governments and institutions can play a crucial role by offering financial incentives, training programmes, and green infrastructure. These measures will help rural areas overcome barriers and facilitate the adoption of key ecological innovations.

### **Comparison with the Previous Studies**

#### **Ecological Culture and Business Innovation**

[Surya et al. \(2021\)](#) underscore the importance of agribusiness in fostering economic growth and development in regions with sustainable environments, particularly in agropolitan areas. Their study highlights that improving environmental sustainability and integrating agribusiness practices contribute to job creation, enhanced agricultural productivity, and overall environmental sustainability. Similarly, [Smetana et al. \(2017\)](#), in their examination of agribusiness clusters, argue that these businesses play a vital role in boosting economic returns and ensuring resource sustainability and rural self-sufficiency. Both studies stress the significance of agribusiness as a key driver of sustainable rural development, with a particular focus on the economic benefits tied to agriculture and environmental management.

[Choudhury and Shaw \(2024\)](#) explore the role of social innovation in promoting sustainable rural development, presenting ecological culture as a mechanism for opening new markets and stimulating economic growth in rural areas. However, their work places greater emphasis on social innovation than on the role of agribusiness in economic development. In contrast, [Surya et al. \(2021\)](#) focus more on the economic aspects and contributions of agribusiness to managing the economic challenges faced by agropolitan regions. Aligned with the findings of [Enquist and Sebhatu \(2021\)](#), who highlight IKEA's commitment to the circular economy and values-based sustainability, this study also reveals how ecological culture can drive business innovation while promoting sustainability. Similarly, Patagonia's eco-friendly business model supports this idea, demonstrating that businesses can achieve economic success while maintaining environmental responsibility, as noted by [O'Rourke and Strand \(2017\)](#). Both case studies reinforce the argument that an ecological mindset is essential for long-term business success.

### Sustainable Agricultural Practices

[McLennon et al. \(2021\)](#), in their exploration of regenerative agriculture and integrative permaculture, highlight the critical role these practices play in enhancing soil, water, and overall ecosystem health, thereby supporting sustainable food production. They position permaculture as a fundamental component for ensuring food security. This perspective is aligned with the study by [Gulaiya et al. \(2024\)](#), which stresses the need for regenerative agriculture to improve soil health, carbon stock, and the well-being of rural communities. Both studies argue that regenerative practices foster biodiversity, enhance the physical properties of the soil, and increase agricultural productivity without damaging the environment. Similarly, [Rhodes \(2017\)](#) supports these views by presenting regenerative agriculture as a means to restore depleted soils, improve water management, and boost farm productivity. Collectively, these studies underscore the significance of ecological regeneration in addressing global challenges related to food security. While both studies focus on regenerative practices, they diverge in their emphasis. [Gulaiya et al. \(2024\)](#) highlight the social and economic benefits of these practices, such as improved farmer welfare and community involvement, whereas [McLennon et al. \(2021\)](#) focus more on the ecological aspects of permaculture and regenerative farming. Thus, the two studies provide complementary perspectives, with [Gulaiya et al. \(2024\)](#) examining the broader social and economic impacts and [McLennon et al.](#) offering a deeper ecological viewpoint.

### Economic Growth through Eco-Tourism

[Litheko \(2021\)](#) explores the role of eco-tourism as a significant factor contributing to economic development and sustainability for small enterprises in Mahikeng, South Africa, leveraging both natural and cultural resources. This aligns with the findings of [Soltani and Taleshi \(2020\)](#), who suggest that the liberalisation of the tourism sector can enhance businesses by generating employment opportunities and promoting the economic growth of rural enterprises focused on tourism entrepreneurship. Both studies underscore the

positive economic impacts of eco-tourism, particularly in terms of job creation, revenue generation, and the diversification of economic activities in rural areas. Similarly, [Ghorbanzadeh \(2018\)](#) examines the role of eco-museums in rural Iran and highlights how eco-tourism can contribute to sustainable development. However, Ghorbanzadeh places a greater emphasis on the cultural dimensions of tourism, suggesting that rural areas can harness cultural tourism for socio-economic advancement. While Ghorbanzadeh's study successfully emphasises the cultural benefits of tourism, [Litheko \(2021\)](#) primarily focused on the economic and business opportunities that eco-tourism offers, positioning it as a key driver for business and economic development in rural settings.

### Impact of Ecological Landscape Design

[Melicher and Špulerová \(2022\)](#) investigate the impacts of incorporating landscape ecology principles into the planning of greenways for the economic development of rural areas, focusing on increased agricultural output and the growth of eco-tourism. This aligns with the study by [Kristensen et al. \(2014\)](#), which explores the influence of landscape design on positive changes and rural development, specifically aiming to improve the connection between agriculture and eco-tourism to create sustainable rural landscapes. Both studies emphasise that ecological landscapes are essential for sustaining rural economies by supporting both agriculture and tourism, while also promoting sustainable ecosystem management from both ecological and economic perspectives. Similarly, [Zhang \(2024\)](#) reinforces these findings by highlighting the effectiveness and necessity of incorporating environmentally friendly designs in the planning of rural landscapes to drive societal changes in agriculture and tourism. [Zhang \(2024\)](#) also suggests that landscape planning interventions benefit not only agriculture but also enhance eco-tourism, thereby contributing to the growth of rural businesses. In contrast, [Melicher and Špulerová \(2022\)](#) offer a more detailed connection by linking greenway planning directly to sectors already tied to economic interests, specifically agriculture and eco-tourism, thus providing greater specificity in their approach.

### Environmental and Cultural Preservation

[Cerquetti et al. \(2022\)](#) examined the role of intangible cultural heritage (ICH), such as local food and wine tourism, in supporting sustainable tourism and preserving the cultural and environmental identity of rural areas. This is mirrored by the study of [Shakya and Vagnarelli \(2024\)](#), which explores the Marche Food and Wine Memories project in Italy, quantifying the economic and social benefits of culinary tourism for rural areas. Both studies conclude that leveraging culture and tradition enhances sustainable tourism, contributing to the development of rural areas and improving their cultural appeal. [Shakya and Vagnarelli \(2024\)](#) also highlight the importance of stakeholder engagement and heritage marketing in promoting cultural heritage, which further enhances business and tourism in community-based ventures. In contrast, [Zuo et al. \(2024\)](#) explore the role of authenticity in rural ICH and its impact on engagement in the tourism sector. Although both studies address ICH tourism, [Zuo et al. \(2024\)](#) place more emphasis on tourists'

perceptions of authenticity and their emotional connections to the destination, while [Cerquetti et al. \(2022\)](#) focus more on the project execution and the economic impacts of ICH initiatives. Thus, although the studies share a common aim, [Zuo et al. \(2024\)](#) provide a more detailed analysis of tourist behaviour and emotional responses to cultural authenticity.

### Barriers to Implementing Ecological Innovations

[Hmamed et al. \(2024\)](#) examine the perceived barriers to implementing Industry 4.0 in small rural businesses, highlighting technological constraints, insufficient funding, and inadequate infrastructure. This is consistent with the study by [Cordeiro et al. \(2024\)](#), which identifies similar challenges in Brazil, particularly financial difficulties and lack of technological support. Both studies stress the importance of overcoming these barriers to facilitate the adoption of Industry 4.0 technologies in small enterprises. Furthermore, [Hmamed et al. \(2024\)](#) identify comparable obstacles, which are also highlighted by [Kumar et al. \(2023\)](#). [Kumar et al. \(2023\)](#) point to the lack of resources and workforce skills as critical factors impeding the implementation of sustainable Industry 4.0 practices in small and medium-sized enterprises (SMEs). The study also advocates for government intervention through policy support and training to ensure the long-term sustainability of businesses in rural areas.

### Opportunities in Rural Economic

[Choudhury and Shaw \(2024\)](#) explore the role of social innovation, driven by ecological culture, in fostering rural resilience and contributing to economic growth in rural areas. They argue that social innovations in agriculture, water management, and gender roles introduce new markets, products, and services, all with a focus on sustainability. These findings are consistent with [Torre et al. \(2020\)](#), who investigated social farming in Italy and the Netherlands. Their research highlights how developing new approaches in rural contexts, particularly in agriculture, enhances resilience. Both studies suggest that ecological culture plays a crucial role in social innovation by being rooted in the community. In addition, [Gobattoni et al. \(2015\)](#) examine how farming systems and community participation in rural development act as a form of social innovation. They argue that involvement in such activities not only improves community resources but also promotes local development. [Choudhury and Shaw \(2024\)](#) align with these findings, asserting that addressing ecological challenges, particularly in agriculture and water management, generates significant economic opportunities for rural areas. This underscores the essential role of social innovation in fostering rural resilience and economic growth.

### Policy and Institutional Support

[Song et al. \(2024\)](#) examine the challenges and opportunities of using policy to promote sustainable energy and market support for sustainable models. They conclude that effective policies, supported by government interventions and private sector involvement,

are crucial for fostering sustainable business models, particularly in rural sectors. This aligns with [Apata \(2019\)](#) study on public expenditure and market forces in Nigeria and China, which highlights the role of policy measures in enhancing development, particularly in agriculture and rural sectors. Both studies emphasise the need for policy support to encourage sustainable practices in rural contexts. [Razumovskaya and Lebedev \(2019\)](#) also stress the need for financial regulation and government intervention to support sustainable agriculture in rural areas. While [Song et al. \(2024\)](#) focus on energy transitions, ([Razumovskaya & Lebedev, 2019](#)) discuss agriculture. Both agree that government action is essential for driving economic development and sustainability in rural areas.

### Community Engagement in Ecological Business

[Subramaniam \(2024\)](#) highlights the significance of community attachment and ecological networks for supporting indigenous and sustainable ecological businesses in rural areas. These factors contribute to increased community support and cultural significance, which are essential for sustainable business. This aligns with [Vidhya Priya \(2024\)](#) study on how entrepreneurship can drive sustainable rural development by prioritising community support and local involvement. The study emphasises that entrepreneurial ecosystems flourish when local communities are engaged in decision-making and eco-friendly practices. [Cunha et al. \(2020\)](#) explore the role of community engagement in sustainable tourism, focusing on place attachment and its contribution to quality entrepreneurship. Their findings reinforce [Subramaniam \(2024\)](#) emphasis on community involvement, asserting that community participation in ecological business strategies is crucial for long-term sustainability and economic diversification.

### Climate Change Adaptation

[Viñals et al. \(2023\)](#) emphasise the need to promote agroforestry systems to address climate change, highlighting their role in enhancing biodiversity, soil health, and carbon stocks in rural areas. This aligns with [Muthuri et al. \(2023\)](#), who found that agroforestry systems in East Africa significantly contribute to climate resilience through soil carbon storage and improvement. Both studies demonstrate the importance of agroforestry in combating climate change and supporting rural livelihoods. Similarly, [Newaj et al. \(2013\)](#) discuss agroforestry's role in improving biodiversity and carbon stocks, with a focus on food security in the face of climate shocks. While [Viñals et al. \(2023\)](#) emphasise social-ecological resilience, [Newaj et al. \(2013\)](#) focus more on the ecological benefits, particularly carbon sequestration. Thus, [Viñals et al. \(2023\)](#) concentrate on agroforestry methods, whereas [Newaj et al. \(2013\)](#) highlight its broader ecological impact in addressing climate change.

### Theoretical Implications

The theoretical implications of this work establish a link between ecological culture and rural business innovation, which is vital for fostering ecological culture and supporting fiscal development in rural sectors. By integrating ecological thinking into business

operations, rural areas can preserve their natural resource bases while continuing human activities (Iannucci et al., 2021). The study highlights the role of ecological culture in agriculture, particularly in promoting sustainable practices such as regenerative agriculture and permaculture (McLennon et al., 2021). Additionally, eco-tourism and strategic landscape planning are identified as potential avenues to stimulate rural economies while preserving cultural values (Melicher & Špulerová, 2022). These findings align with the theoretical framework, suggesting that incorporating ecological culture into business strategies promotes long-term sustainable success by fostering interactions between economic and ecological variables, creating a positive feedback loop (Shakya & Vagnarelli, 2024). Furthermore, the study contributes to advancing the understanding of ecological culture within rural business contexts and provides a foundation for future policy and sustainable business solutions (Xiang & Xu, 2021).

## Conclusion

This paper seeks to address the gap in the literature by exploring the relationship between ecological culture and business innovation, particularly in relation to rural landscape conservation and economic development. The study demonstrates that incorporating ecological culture into rural business systems fosters sustainable growth, encompassing tourism, food production, and the enhancement of the aesthetic qualities of landscapes. The findings suggest that for sustainable development, economic growth must be integrated into new business opportunities while preserving valuable natural resources, particularly rural ecosystems. This integration is essential for overcoming the challenges posed by urbanisation and the increasing environmental degradation within rural regions.

## Limitations of the Study

This study primarily employs a qualitative SLR, which relies on the availability and quality of existing literature. While this approach offers valuable insights, it is limited by the scope of available data and may not capture emerging trends or unpublished local studies. Additionally, the study is constrained by its focus on secondary data sources, which may not always fully reflect real-time business practices in rural areas.

## Future Work

Future research should focus on analysing the long-term effects of ecological culture-driven business models on the rural economy. There is also a need for field-level studies to assess the feasibility and effectiveness of these models in practice, identifying potential barriers to their success. Expanding research in these areas could further explore the methods, approaches, and policy measures that can support the integration of these innovations into rural life and business, ensuring their deeper establishment.

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