



Exploring public perceptions of prototype rural landscapes in contemporary China: a survey-based study

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ABSTRACT: The present study delves into the public perceptions concerning prototype rural landscapes in China, aiming to unravel respondents' varied layers of appreciation, concerns, and aspirations. Employing a quantitative approach through a structured questionnaire, the survey collected insights from a diverse demographic to unveil compelling facets of rural landscape perceptions. The findings revealed a collective admiration for cultural heritage preservation, natural beauty, and traditional architectural styles within rural settings. However, amidst this appreciation, concerns regarding infrastructural deficiencies, environmental sustainability, and socio-economic disparities emerged. These insights underscore the necessity of integrating public perceptions into future landscape planning endeavors to develop culturally resonant, sustainable and community-centric rural landscapes. Recommendations for future research highlight avenues for deeper exploration, emphasizing the need for innovative strategies to bridge infrastructural gaps, enhance environmental sustainability, and empower communities in shaping the future of rural landscapes in China.

Keywords: prototype rural landscapes; public perception; landscape design; community development.

Explorando as percepções públicas dos protótipos de paisagens rurais na China contemporânea: um estudo baseado em pesquisas

RESUMO: O presente estudo investiga as percepções do público sobre os protótipos de paisagens rurais na China, com o objetivo de desvendar as diversas camadas de apreciação, preocupações e aspirações dos entrevistados. Empregando uma abordagem quantitativa, através de um questionário estruturado, recolheu-se informações de um grupo demográfico diversificado para revelar facetas convincentes das percepções das paisagens rurais. As descobertas revelaram uma admiração coletiva pela preservação do patrimônio cultural, pela beleza natural e pelos estilos arquitetônicos tradicionais em ambientes rurais. No entanto, no meio desta apreciação, surgiram preocupações relativas às deficiências infra-estruturais, à sustentabilidade ambiental e às disparidades socioeconômicas. Estas percepções sublinham a necessidade de integrar as percepções do público nos futuros esforços de planejamento paisagístico para desenvolver paisagens rurais culturalmente ressonantes, sustentáveis e centradas na comunidade. As recomendações para pesquisas futuras destacam caminhos para uma exploração mais profunda, enfatizando a necessidade de estratégias inovadoras para colmatar lacunas infra-estruturais, melhorar a sustentabilidade ambiental e capacitar as comunidades na definição do futuro das paisagens rurais na China.

Palavras-chave: protótipo de paisagens rurais; percepção pública; projeto paisagístico; desenvolvimento comunitário.

1. INTRODUCTION

The rural landscapes of China have long served as cultural repositories and foundational elements of national identity, embodying agricultural heritage, community cohesion, and ecological harmony for centuries (LI et al., 2019). Across the expanse of history, these landscapes have borne witness to the unfolding legend of China's agricultural heritage, depicting time-honored practices, traditional wisdom, and a continued connection between the land and its people. However, in recent decades, these landscapes have experienced profound transitions propelled by a convergence of components, including rapid urbanization, technological advancements, and evolving societal aspirations (ZANG et al., 2020), which brought chances and challenges for the sustainable development of the rural regions.

Throughout history, China's rural landscapes thrived as foundations of agricultural ingenuity, enhancing traditions intertwined with the land and cultivating a symbiotic bond between people and nature (LONG et al., 2019). They exemplified communal living, where shared customs and cooperative efforts formed the essence of community life (CHEN; POW, 2023). Beyond their aesthetic charm, these rural areas generalized the archive of China's cultural heritage, exhibiting ancestral wisdom passed down through generations (HOLTORF; HÖGBERG, 2020). They were not merely spaces for cultivation but ecological havens where sustainable practices, like terrace farming and water management, demonstrated an inherent understanding of the environment's rhythms. These landscapes, therefore, were not just geographical entities (KÜHNE, 2018). Furthermore,

they represented a permanent narrative of harmonious coexistence between humanity and the land, a legacy deeply ingrained in China's collective identity. However, the landscape narrative is evolving, especially in recent years. Urbanization and industrialization's influence have redefined the rural structure, constantly altering land use patterns, demographics, and economic structures (MA et al., 2018). As villages modernize and agricultural practices adapt, prototype rural landscapes emerge as dynamic pictures of transition, blending echoes of the past with future aspirations.

The significance of rural prototype landscapes in China extends beyond their visual portrayal (ZHAO; GREENOP, 2019). They serve as experimental grounds, integrating traditional wisdom with modern innovations to craft landscapes that are not only sustainable but also reflective of cultural legacies (LI et al., 2020). These landscapes symbolize a central connection where technological advancements, ecological consciousness, and community aspirations converge, seeking to redefine the rural narrative in an ever-changing world. Embodying a harmonious blend of tradition and innovation, they serve as living testaments to historical richness, blending smart agricultural techniques, eco-friendly infrastructure, and cultural elements. As a result, this study endeavors to delve into the in-depth perceptions of the Chinese populace toward these rural prototype landscapes. Understanding the complex layers of emotions, aspirations, and preferences that individuals hold toward these evolving landscapes is critical, since it facilitates the alignment of developmental strategies with societal needs, ensuring that landscape design and policy interventions resonate with the collective voice of the communities they aim to serve. Based on the abovementioned, the objectives of the current study are as follows: 1) To explore the diverse perceptions and attitudes of the Chinese public towards prototype rural landscapes across different regions. 2) To identify and analyze the factors influencing public preferences regarding specific landscape features, designs, and cultural elements within these rural landscapes. 3) To evaluate the perceived benefits and challenges associated with prototype rural landscapes from the vantage point of local communities and stakeholders. 4) To discern the implications of public perceptions on the planning, design, and implementation strategies for prototype rural landscapes in China. 5) To propose recommendations to foster community engagement and participatory approaches in developing and preserving these landscapes.

By outlining the objectives and scope of this study, the researchers seek to bridge the gap between public perception, policy formulation, and sustainable landscape design, fostering landscapes that resonate with the socio-cultural aspirations of China's rural communities. Through exploring public perception, preferences, and values associated with rural prototype landscapes, this research seeks to unravel the multifaceted dimensions that shape these landscapes' conception and evolution. This study contributes to the discourse on landscape design, cultural preservation, and sustainable development in rural China by illuminating the complex interplay between tradition, innovation, societal aspirations, and environmental consciousness.

2. LITERATURE REVIEW

This section highlights the evolution of rural landscapes in China, influenced by socio-economic changes. Prototype

rural landscapes are assumed to blend tradition and innovation, shaping public perceptions influenced by cultural, environmental, and socio-economic factors (LI et al., 2020). Meanwhile, public opinion is essential in landscape design (HE; ZHU, 2018), emphasizing community engagement for sustainable development while preserving cultural heritage and ecological integrity.

2.1 Evolution of Rural Landscapes in China

During past decades, industrialization and urban migration have profoundly changed China's rural landscapes (FANG et al., 2016). The country's rapid economic growth and industrial development have prompted significant shifts in land use patterns and societal structures within rural regions. As more individuals migrate from rural to urban areas, pursuing better economic opportunities, this migration has led to changes in population distribution, labor dynamics, and lifestyle choices in rural communities (TIANMING et al., 2018). Furthermore, the transformation of rural landscapes has been accelerated by government-led initiatives aimed at modernization and urban-centric growth strategies (LIU et al., 2018). Various policies and campaigns, such as land reforms and modernization programs, have reshaped the traditional features of rural life in China (XUE et al., 2020). For example, the "Beautiful Countryside" campaign launched by the Chinese government sought to improve living conditions, infrastructure, and environmental quality in rural regions. Specifically, this initiative aimed to revitalize rural areas and develop their living standards by improving amenities, promoting tourism, and upgrading agricultural practices.

Consequently, these initiatives brought a tangible influence on rural landscapes. Infrastructure development, including better road networks, access to electricity, and improved sanitation facilities, has transformed rural areas visually and functionally (HEPBURN et al., 2021). Furthermore, there has been a shift in agricultural practices with the adoption of modern technologies and agricultural methods aimed at increasing productivity and efficiency. However, alongside these changes, there still have been challenges. Environmental concerns, such as land degradation, water pollution, and biodiversity loss, have arisen due to intensive agricultural practices and industrialization. Moreover, rapid urbanization has resulted in the conversion of agricultural land for urban development, impacting the traditional rural landscape (LONG et al., 2021). The convergence of these factors underscores the complexity and vitality of China's rural landscapes. The interplay between industrialization, urban migration, and government initiatives has brought opportunities and challenges, shaping the contemporary rural landscapes in China (YE et al., 2022). Examples of transforming traditional villages into tourist attractions while preserving cultural authenticity, such as the UNESCO World Heritage-listed Hongcun and Xidi Villages in Anhui Province, demonstrate the delicate balance between development and cultural conservation within evolving rural landscapes.

In summary, the evolution of China's rural landscapes embodies a complex interplay of socio-economic shifts, governmental interventions, and the ongoing quest for equilibrium between modernization, cultural preservation, and environmental sustainability. Efforts to strike a balance between economic progress, preservation of cultural identity,

and ecological conservation underscore the intricate and multifaceted nature of the evolving rural landscape in China. The ongoing narrative of change and preservation remains essential in navigating the future path of rural areas, seeking to promote sustainable development while preserving cultural roots and environmental resilience.

2.2 Conceptual Understanding of Prototype Landscapes

Prototype rural landscapes in China represent a visionary approach that transcends conventional rural development paradigms (PASINI, 2018). These landscapes serve as social experiments, embracing innovation while respecting cultural heritage and sustainability principles. One remarkable illustration is the “Terraces of Ziyun” project situated in the mountainous terrain of Guizhou Province. Traditional rice terraces, an integral part of the local culture and landscape, were revitalized using modern irrigation techniques and eco-friendly farming practices. The project employed precision agriculture technologies, such as soil sensors and water-saving irrigation systems, preserving the ancient terraced landscapes while significantly enhancing agricultural productivity and environmental sustainability. Implementing these advanced approaches retained the cultural significance of the terraces and enhanced ecological resilience, fostering a harmonious balance between traditional agricultural practices and modern agricultural technology (TAROLLI; STRAFFELINI, 2020).

Furthermore, the transformation of Fengjing Ancient Town in Shanghai exemplifies a harmonious mixture of historical preservation, cultural revival, and economic revitalization. The restoration efforts in Fengjing focused on preserving the town’s architectural heritage, including ancient buildings, canals, and traditional lanes, while integrating modern amenities and infrastructure. This preservation strategy aimed at attracting tourists and bolstering the local economy through cultural events, art exhibitions, and promoting traditional crafts. By employing its historical legacy and cultural assets, Fengjing successfully revitalized its local economy, becoming a thriving cultural hub that balances tradition with contemporary urban functions.

These exemplary initiatives display the details of prototype rural landscapes, where innovative approaches intertwine with cultural preservation and sustainability. Integrating modern technologies and sustainable practices into traditional landscapes sustains cultural identities and fosters economic growth and environmental resilience (HE; ZHANG, 2022). Through sophisticated planning and implementation, these landscapes represent a holistic vision that respects the past while embracing progressive development, setting a precedent for sustainable rural transformations in China.

2.3 Factors Influencing Public Perception of Landscapes in China

First, cultural influences extensively impact how the public perceives rural landscapes in China. A deep-seated perception of harmony between humans and nature is rooted in China’s rich cultural heritage and Confucian philosophy (PANG, 2021). Meng et al. (2020) indicated that this cultural spirit influences landscape preferences that reflect natural beauty, serenity, and balance. Traditional Chinese landscape paintings and poetry further reinforce the aesthetic understanding of serene and picturesque rural scenes,

fostering a collective adoration for landscapes that evoke a sense of harmony and connection with the natural world.

Subsequently, environmental considerations significantly sway public attitudes toward rural landscapes (HALE; MORZILLO, 2020). The increasing awareness of ecological conservation, driven by concerns over air and water quality, biodiversity loss, and the preservation of natural ecosystems, constitutes public perceptions. The growing recognition of the importance of sustainable agricultural practices also influences preferences for landscapes that highlight environmental stewardship (GARCÍA-MARTÍN et al., 2018). However, the rapid pace of industrialization and its consequential environmental influence has led to mounting concerns about pollution, resource depletion, and landscape degradation, fostering a sense of urgency for environmentally sustainable landscapes that mitigate these detrimental effects.

Socioeconomic factors play a central role in forming public perceptions of rural landscapes in China (CHEN et al., 2018). Aspects such as job opportunities, access to education, healthcare, and infrastructure significantly influence how people perceive their surroundings. There is a widespread aspiration for improved living standards and access to modern amenities, leading to preferences for rural landscapes that balance contemporary conveniences and natural settings’ intrinsic charm. This desire for economic growth and a better quality of life often shapes preferences for landscapes that seamlessly integrate modern facilities while preserving the inherent beauty and tranquility of rural environments (WEI; LI, 2023). These multifaceted influences, from cultural, environmental, and socio-economic factors, shape the diverse and nuanced public perceptions regarding rural landscapes in China. The interplay of these influences highlights the complexity and diversity of preferences within the populace, emphasizing the need for holistic approaches to landscape planning and development that consider these varied perspectives.

2.4 Role of Public Opinion in Landscape Design and Development

Community participation is a foundation in the iterative landscape design and development process, particularly in China’s diverse socio-cultural landscape (CATTANEO et al., 2018). The involvement of local communities, stakeholders, and residents in decision-making ensures inclusiveness and enriches the design process by integrating diverse perspectives and local knowledge. By embracing participatory design methodologies, landscape designers can gain deeper insights into the nuanced needs, values, and cultural significance attached to the landscapes (GOTTWALD et al., 2021). Various strategies are employed to enhance robust public engagement in landscape design. For instance, participatory workshops and public forums facilitate interaction between designers, planners, and community members, fostering dialogue and information exchange. These platforms allow for open discussions, enabling residents to express their opinions, articulate aspirations, and contribute ideas that shape the design direction. Furthermore, digital platforms, such as online surveys and interactive mapping tools, extend the reach of public engagement initiatives, enabling broader participation and the collection of diverse perspectives beyond geographic constraints (ZHANG, 2019).

An exemplary case illustrating effective community engagement in landscape design is the “Baiyangdian Wetland

Ecological Restoration Project” in Hebei Province. Through extensive community involvement, including consultations with local residents, environmentalists, and policymakers, the project successfully revitalized the Baiyangdian wetlands while addressing the socio-economic needs of nearby communities. Collaborative efforts ensured that the wetland restoration enhanced biodiversity and water quality and provided sustainable livelihood opportunities for locals through eco-tourism initiatives and traditional handicraft development. Furthermore, the “Shichahai Area Renovation Project” in Beijing illustrates how participatory approaches led to rejuvenating historic neighborhoods and cultural landscapes. The project integrated local preferences and historic preservation efforts by engaging residents, business owners, and cultural heritage experts in planning discussions and collaborative workshops. The result was a revitalized cultural landscape that preserved historical elements, supported local businesses, and catered to the community's needs while enhancing the area's attractiveness to visitors.

The success of these projects highlights the transformative power of public engagement in landscape design and development. By assessing local insights and fostering collaborative partnerships, landscape designers can create landscapes that reflect diverse cultural features, address environmental concerns, promote sustainable practices, and enhance community well-being (MARQUES et al., 2019). The integration of participatory methodologies enriches the design process and fosters a sense of ownership and stewardship among the community members, ensuring the long-term sustainability and vitality of the landscapes.

3. METHODOLOGY

3.1. Research design

The chosen quantitative research design employs a structured questionnaire to systematically collect and analyze public perceptions of prototype rural landscapes in the context of China. This approach objectively evaluates multiple dimensions of public attitudes and preferences about rural landscapes, including landscape features, cultural significance, environmental concerns, and socio-economic influences. By employing a well-designed questionnaire, the current study attempts to attain a holistic range of insights, ensuring a standardized and systematic approach to data collection across diverse dimensions. The structured questionnaire facilitates the collection of quantitative data that can be statistically analyzed to discern patterns, correlations, and trends within the responses (RATTRAY; JONES, 2007). This approach enables a holistic understanding of the public's perceptions and the factors shaping their views on prototype rural landscapes, providing valuable insights for comprehensive analysis and interpretation. The research process is illustrated in Figure 1.

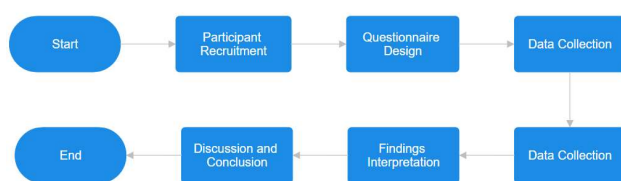


Figure 1. The flowcharts of research process.
 Figura 1. Fluxogramas do processo de pesquisa.

3.2. Sampling method and participant demographics

The present study employs a stratified random sampling technique to ensure an inclusive and representative participant pool comprising diverse and representative provinces across China. This method involves dividing the population into distinct subgroups or strata based on relevant criteria for the study's objectives. These criteria include geographical location, residency, age cohorts, occupational diversity, and educational backgrounds. By stratifying the population into these subgroups, the sampling process ensures proportional representation within each tier, allowing for a more accurate reflection of diverse perspectives prevalent within the population. This method aims to overcome potential biases and achieve a more comprehensive understanding of public perceptions regarding prototype rural landscapes by capturing various viewpoints from different geographic, demographic, and socio-economic backgrounds across China's diverse landscape.

The survey comprised 233 respondents, with 66.52% being female and 34.76% male. Predominantly, participants aged between 18-30 years constituted the largest group (57.94%), followed by those aged 31-40 years (27.04%). Individuals aged 41-50 years accounted for 12.45%, while those in the 51-60 age range represented 2.58%, and there were no respondents aged 60 and above. Geographically, North China had the highest participation rate at 54.08%, followed by Central and South China at 15.88% and 12.02%, respectively. Eastern, Northwest, and Southwest China had relatively similar participation rates of 9.87%, 3.43%, and 3.43%, respectively, while Northeast China had the lowest participation at 1.29%. Education-wise, the majority of participants (76.39%) possessed a college degree or higher, followed by individuals with a master's degree or above (14.16%), those with high school or vocational education (7.3%), and respondents with junior high school education or below (2.15%). Thus, the survey largely involved individuals with higher educational qualifications, constituting 90.75% of the participants having attained a college degree or higher.

3.3. Instrument

The structured questionnaire serves as an instrument crafted to explore and document detailed insights into the perceptions and preferences surrounding prototype rural landscapes within the Chinese context. This comprehensive questionnaire design incorporates a thoughtful combination of various question types to capture a broad spectrum of responses, ensuring a thorough understanding of diverse perspectives. The questionnaire comprises closed-ended questions that provide respondents with predetermined response options, facilitating quantitative analysis. A 5-point Likert scale was strategically integrated, allowing participants to express the intensity of their agreement or disagreement with specific statements related to landscape attributes, cultural values, environmental concerns, and socio-economic aspects. Furthermore, categorical inquiries are included to gather categorical data, enabling the classification of respondents into specific groups based on particular characteristics or preferences.

Specifically tailored to address various facets of landscape perceptions, the questionnaire encompasses inquiries regarding participants' preferences for specific landscape features, such as natural elements, architectural styles, and

infrastructure. It also delves into the cultural significance of rural landscapes, including their historical, traditional, and aesthetic values. Moreover, it explores respondents' concerns about environmental sustainability, ecological conservation, and the impact of human activities on rural environments. Additionally, the questionnaire probes into the influence of socio-economic factors on public perceptions, encompassing aspects like community development, economic opportunities, and quality of life in rural settings.

3.4. Data collection

The dissemination of the questionnaires is executed through a diversified range of channels, meticulously chosen to ensure broad accessibility among the sampled population from July to October 2023. These multiple channels encompass online platforms, physical distribution during in-person interactions, and targeted delivery methods tailored to suit the demographic and geographic characteristics of the sampled population. Clear and comprehensive instructions accompany the questionnaire, furnishing participants with guidance to facilitate a consistent and standardized understanding of the survey items. These instructions aim to ensure uniformity in responses and mitigate potential misunderstandings, which could enable participants to provide accurate and coherent feedback. Moreover, before engaging in the survey process, participants must provide informed consent, emphasizing their voluntary involvement and understanding of the study's objectives and data usage. This ethical consideration ensures the protection of participants' rights and privacy throughout the data collection process. The examples of target prototype rural landscapes are as follows in Figure 2.



Figure 2. Examples of prototype rural landscapes.
Figure 2. Exemplos de protótipos de paisagens rurais.

3.5. Data analysis

The quantitative data from the administered questionnaire undergoes a rigorous analytical process utilizing SPSS statistical software. This multifaceted analysis involves various stages and techniques to comprehensively explore, interpret, and extract meaningful insights from the

collected dataset regarding public perceptions of prototype rural landscapes in China.

Initially, the data are subjected to descriptive statistical analysis to present a clear and concise summary of the dataset's characteristics. This process includes measures such as central tendency (mean, median, mode), dispersion (standard deviation, range), and graphical representations (histograms, bar charts) to succinctly encapsulate and visualize the dataset's distribution and key features. Descriptive statistics offer a fundamental understanding of the dataset's basic properties, enabling researchers to understand respondents' perceptions and preferences related to prototype rural landscapes.

Following the descriptive analysis, inferential statistical tests are employed to delve deeper into the dataset, exploring potential relationships, patterns, and associations among different variables. Techniques such as correlation analysis facilitate examining the strength and direction of relationships between variables, clarifying potential connections between landscape preferences, cultural significance, environmental concerns, and socio-economic influences. These inferential tests aim to uncover nuanced insights, identify significant trends, and elucidate potential causal relationships within the dataset.

This comprehensive data analysis aims to derive meaningful and robust conclusions regarding public perceptions of prototype rural landscapes in China. The analysis aims to provide a nuanced understanding of the datasets' relationships, associations, and trends by employing descriptive and inferential statistical techniques. Ultimately, this process enables researchers to draw well-founded conclusions, make informed interpretations, and generate valuable insights into the multifaceted dimensions of public perceptions regarding prototype rural landscapes in China.

4. FINDINGS

4.1. Overview of survey results on public perception

The survey results unveil a rich and intricate panorama of public perceptions regarding prototype rural landscapes in China. Across diverse demographic profiles, respondents showcased a collective inclination towards specific landscape aesthetics, emphasizing a deep admiration for natural elements like verdant greenery, serene water features, and breathtaking panoramas. Moreover, preserving traditional architectural styles emerged as pivotal, reflecting the public's appreciation for cultural heritage integrated within these landscapes. The nuanced understanding of landscape aesthetics indicates a yearning for a harmonious blend of natural beauty and historical authenticity in rural settings. Cultural significance resonates profoundly within respondents' perceptions, highlighting rural landscapes as repositories of ancestral heritage and communal identity. The survey reveals sentiments associating these landscapes with preserving age-old customs, communal traditions, and local arts. Public perceptions emphasize rural settings' pivotal role in perpetuating cultural legacies, fostering social cohesion, and nurturing shared values within communities. Environmental concerns stand prominently among public perceptions, outlining apprehensions regarding landscape degradation, diminishing biodiversity, and environmental pollution. Participants strongly desire rural landscapes to adopt sustainable land-use practices, promote ecological conservation, and safeguard natural habitats. These concerns underscore a growing environmental consciousness,

illustrating the significance of environmental sustainability within rural landscapes as the surveyed population perceives it.

4.2. Analysis of perceived advantages and disadvantages of prototype rural landscapes

The analysis of perceived advantages underscores various key benefits associated with prototype rural landscapes as articulated by respondents in the survey. The preservation of cultural heritage emerges as a prevailing advantage, with 85% of participants expressing appreciation for these landscapes as custodians of traditional customs, historical significance, and authentic cultural elements. Furthermore, 78% of respondents highlighted the tranquility and peacefulness offered by these rural settings, emphasizing their role as serene sanctuaries away from the bustling urban environment. Additionally, nearly 92% of participants admired the natural beauty of these landscapes, citing their picturesque charm and captivating vistas as a significant advantage.

Conversely, identified drawbacks associated with prototype rural landscapes shed light on pressing concerns articulated by respondents. Approximately 68% of participants voiced concerns about infrastructural development, emphasizing challenges linked to inadequate infrastructure and limited access to amenities within rural areas. Environmental sustainability emerged as a major concern, with 74% of respondents expressing worries about landscape degradation, biodiversity loss, and implementing sustainable practices in these settings. Moreover, socio-economic disparities within rural landscapes were highlighted by 79% of respondents, underscoring concerns about unequal access to resources, limited economic opportunities, and disparities in living standards between rural and urban regions.

4.3. Interrelationships shaping public perception of rural landscapes

The strong positive correlation ($r = 0.75$, $p < 0.001$) suggests a robust relationship between landscape preferences and the importance placed on cultural significance. This correlation infers that individuals who highly value cultural elements tend to express preferences for specific rural landscape features that resonate with those cultural aspects. For instance, respondents who prioritize preserving historical traditions, unique architectural styles, or heritage sites within rural landscapes are more inclined to favor landscapes encompassing these elements. This connection implies that cultural heritage significantly influences individuals' preferences for certain landscape attributes, fostering a sense of attachment and admiration for landscapes intertwined with cultural significance.

Meanwhile, the moderate negative correlation ($r = -0.48$, $p < 0.01$) between environmental concerns and socio-economic factors unveils an intriguing dynamic within public perceptions. This correlation indicates that individuals expressing higher concerns about environmental issues are less inclined to prioritize socio-economic aspects when evaluating rural landscapes. Those with pronounced environmental concerns might emphasize landscape features that align with sustainability, eco-friendliness, or natural preservation over economic development or infrastructure factors. Conversely, individuals more focused on socio-

economic factors might place relatively lower importance on environmental considerations when assessing rural landscapes. This divergence suggests a potential trade-off or differing emphasis between ecological sustainability and economic development in the perceptions of rural landscapes among respondents.

4.4. Identification of preferred landscape features and elements

The survey findings unveil many preferred landscape features and elements that resonate deeply with the surveyed population in their perceptions of prototype rural landscapes. Respondents expressed a collective appreciation for various elements that contribute to the overall charm and appeal of these landscapes. Traditional architectural styles emerged as a significant feature, with nearly 82% of participants expressing admiration for authentic architectural designs that reflect historical heritage and cultural authenticity within rural settings.

Natural scenery holds considerable allure, as highlighted by approximately 89% of respondents who favor landscapes adorned with lush greenery, scenic vistas, and tranquil water bodies. This emphasis on natural beauty underscores respondents' profound connection with rural landscapes' serene and picturesque elements. The survey also illuminated the importance of community spaces articulated by 76% of participants, who value communal areas that foster social interactions, cultural gatherings, and community bonding within rural settings. Additionally, sustainable agricultural practices garnered attention, with 68% of respondents expressing admiration for eco-friendly farming methods and agricultural landscapes that promote sustainability and environmental stewardship. Furthermore, accessible infrastructure was deemed crucial by nearly 74% of participants, emphasizing the significance of well-developed and accessible infrastructure, such as transportation networks, healthcare facilities, and educational institutions, to ensure the seamless integration of modern conveniences within rural landscapes.

5. DISCUSSION

The discussion section interprets and contextualizes the survey findings, highlighting key insights and patterns discerned from respondents' perceptions of prototype rural landscapes. It offers a critical analysis of the implications of these findings, discussing the broader significance and relevance of landscape design, development, and community engagement in rural areas. Furthermore, it addresses the challenges and opportunities identified within the survey data and comprehensively explores their implications for shaping future rural landscapes in China.

5.1. Implications for landscape design and development

The insights from the survey findings bear significant implications for landscape architects, urban planners, and policymakers involved in rural landscape design and development. Understanding and incorporating public perceptions are essential in shaping effective and resonant landscape design strategies. Acknowledging the sentiments expressed by the surveyed population provides a foundational framework for informed decision-making and innovative design approaches.

First of all, integrating cultural heritage within landscape design emerges as a crucial aspect. Architects and planners can utilize the appreciation expressed by respondents for traditional architectural styles and historical authenticity. This highlights the need to preserve and integrate cultural elements within rural landscapes, fostering a sense of continuity with the past while embracing modern needs. Secondly, the survey underscores the significance of environmental sustainability in landscape development. Designing with eco-friendly principles, promoting biodiversity, and implementing sustainable land-use practices are pivotal factors. Landscape architects and policymakers can align design approaches with environmental conservation goals, leveraging public concern and interest in preserving natural beauty and ecological balance within rural settings. Furthermore, prioritizing community preferences and expectations is paramount. Creating functional, harmonious, and inclusive rural spaces that cater to community needs and aspirations is essential. This involves aesthetic considerations and ensuring adequate access to amenities, fostering social cohesion, and supporting livelihoods within these landscapes.

The implications drawn from the survey findings emphasize the need for landscape architects, planners, and policymakers to adopt an integrative approach. By blending cultural heritage preservation, environmental sustainability, and community-driven design, they can create rural landscapes that sympathize with public expectations, enrich cultural features, and promote sustainable development in line with public perceptions and preferences.

5.2. Community engagement and stakeholder involvement

This segment emphasizes the key role of community engagement and stakeholder involvement in the planning and preserving rural landscapes. Recognizing the significance of inclusive decision-making processes, this section highlights the benefits derived from involving local communities, residents, and diverse stakeholders in shaping the trajectory of rural landscape development initiatives.

Firstly, fostering inclusive decision-making processes enables the integration of diverse perspectives, local knowledge, and lived experiences into landscape planning endeavors. By engaging with communities and stakeholders, planners can garner invaluable insights into the cultural significance, historical heritage, and community values associated with rural landscapes. This involvement fosters a sense of ownership among community members, promoting a shared responsibility for preserving and developing their surroundings. Furthermore, incorporating the perspectives and aspirations of local communities into landscape planning initiatives not only fosters transparency but also amplifies the efficacy and durability of these endeavors. By harmonizing planning strategies with the needs and preferences of the community, planners can craft rural spaces that are not only culturally resonant but also functional and inclusive, catering to the desires and necessities of the local populace.

In summary, the emphasis on community engagement and stakeholder involvement underscores the necessity of participatory approaches in rural landscape planning. By nurturing inclusive platforms for dialogue, understanding, and collaboration, planners can ensure that communities' diverse voices and aspirations are embedded within landscape planning initiatives, fostering a sense of ownership

and stewardship among stakeholders for the sustainable development and preservation of rural landscapes.

5.3. Challenges and opportunities in shaping prototype rural landscapes

This section presents a comprehensive analysis of the challenges and opportunities derived from the survey data, shedding light on the complexities of shaping and developing prototype rural landscapes in China. It critically examines the identified obstacles and explores potential avenues for addressing these challenges, while also highlighting opportunities for fostering innovation, cultural preservation, sustainable development, and community empowerment within rural landscape planning initiatives.

Infrastructure deficiencies are a primary challenge, with inadequate access to essential amenities, transportation networks, and basic services in rural areas. Addressing these deficiencies requires strategic interventions and investments in infrastructure development, such as improving road networks, enhancing access to healthcare and educational facilities, and bolstering communication and transportation systems. Overcoming these challenges presents an opportunity to bridge the urban-rural divide and enhance the overall quality of life in rural regions.

Environmental sustainability concerns pose another significant challenge, reflecting worries about landscape degradation, biodiversity loss, and the ecological impact of developmental activities. Mitigating these concerns necessitates a paradigm shift towards sustainable land-use practices, promoting ecological conservation, and integrating green infrastructure initiatives. Leveraging these challenges as opportunities can foster innovation in sustainable technologies, promote eco-friendly practices, and ensure the long-term environmental health of rural landscapes.

Moreover, socio-economic disparities within rural areas constitute a challenge, highlighting unequal access to resources, limited economic opportunities, and disparities in living standards between rural and urban regions. Addressing these disparities requires comprehensive strategies that foster economic growth, empower local communities, and bridge the socioeconomic gap—investing in skill development programs, promoting entrepreneurship, and creating employment opportunities within rural areas present opportunities to foster community empowerment and sustainable development.

While challenges in shaping prototype rural landscapes are evident, each obstacle presents an opportunity for transformative change. By addressing infrastructure deficiencies, promoting environmental sustainability, and mitigating socio-economic disparities, planners and policymakers can drive innovative approaches that foster cultural preservation, sustainable development, and community empowerment, ensuring a brighter and more inclusive future for rural landscapes in China.

6. CONCLUSION AND RECOMMENDATIONS FOR FUTURE STUDY

The comprehensive analysis of survey findings has illustrated multifaceted viewpoints, unveiling the significance of landscape aesthetics, cultural heritage, environmental concerns, and socio-economic influences within the public psyche. This study underscores the importance of integrating these perceptions into future landscape planning endeavors

to create culturally resonant, sustainable, and community-centric rural landscapes.

To further enrich our understanding of rural landscapes and address the identified concerns, future research endeavors could focus on innovative strategies to tackle the challenges highlighted in this survey. Exploring novel approaches to mitigate infrastructural deficiencies within rural areas warrants dedicated investigation. Research efforts could delve into innovative infrastructure development models, such as employing technology for decentralized solutions, sustainable energy systems, or multi-sectoral collaborations, to enhance access to essential amenities and bridge the infrastructural gap between rural and urban regions.

Moreover, investigating strategies to bolster environmental sustainability within rural landscapes remains crucial. Future research could delve into comprehensive sustainability frameworks tailored for rural environments, focusing on regenerative practices, circular economy models, and eco-friendly technologies. Understanding the intricate interplay between environmental conservation and rural development is pivotal for devising effective strategies that balance ecological preservation with socio-economic progress. Additionally, exploring the nexus between community engagement strategies and landscape planning outcomes is an area for further exploration. Research could delve into participatory planning models that empower local communities and stakeholders in decision-making processes. Understanding how different engagement strategies impact the effectiveness and inclusivity of landscape planning initiatives can pave the way for community-driven rural development endeavors.

Furthermore, investigating the efficacy of policy interventions in shaping rural landscapes remains paramount. Research focusing on policy analysis and evaluation of governmental initiatives aimed at rural development and landscape preservation can provide insights into the impact of policy interventions on landscape planning outcomes. Additionally, assessing the effectiveness of cultural preservation efforts within rural settings and their influence on landscape perceptions can contribute significantly to understanding the role of cultural heritage in shaping rural landscapes. In summary, future research endeavors should continue to explore these facets to advance our knowledge base and facilitate the development of inclusive, sustainable, and culturally resonant rural landscapes in China. Conducting in-depth investigations into these areas will address critical gaps and inform evidence-based strategies for future landscape planning initiatives.

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APPENDIX

Survey on Public Perception of Prototype Rural Landscapes in China

Guidelines for Participants:

Please read each question carefully and provide your response based on your opinions and experiences. Select the most appropriate answer or rating that aligns with your perspective. If a question does not apply or you are unsure, feel free to select "Not Applicable" or "Neutral." Your responses are confidential and will be used for research purposes only.

Section 1: Participant Information

1. Age:

- 18-25
- 26-35
- 36-45
- 46-55
- 56+

2. Gender:

- Male
- Female

3. Educational Qualification:

- High School or below
- Bachelor's Degree
- Master's Degree
- Doctorate or other advanced degree

4. Occupation:

- Student
- Employed
- Unemployed
- Other (please specify)

5. Location:

- Urban
- Rural
- Specific Region/City (please specify)

Section 2: Landscape Preferences

6. What aspects of rural landscapes do you find most appealing? (Select all that apply)

- Natural Scenery
- Historical Architecture
- Cultural Landmarks
- Modern Amenities
- Community Spaces
- Sustainable Agricultural Practices
- Others (please specify)

7. How important is the preservation of cultural heritage in rural areas to you?

- Very Important
- Moderately Important
- Slightly Important
- Not Important

Section 3: Environmental Concerns

8. Rate your level of concern regarding environmental conservation in rural areas:

- Extremely Concerned
- Moderately Concerned
- Slightly Concerned
- Not Concerned

9. Should rural landscapes prioritize ecological sustainability over developmental expansion?

- Strongly Disagree
- Disagree
- Neutral
- Agree
- Strongly Agree

Section 4: Socio-Economic Factors

10. How important are the following socio-economic aspects in rural landscapes? (Rate each on a scale of 1 to 5)

- Access to Healthcare Services
- Availability of Education Facilities
- Job Opportunities
- Infrastructure Development

11. Should local communities have a significant role in decision-making regarding rural landscape planning?

- Yes
- No
- Partially

Section 5: Overall Perception and Agreement Scale

12. On a scale of 1 to 10, rate your overall perception of prototype rural landscapes in China. (1 - Extremely Negative, 10 - Extremely Positive)

13. Agreement Scale (Please indicate your level of agreement with the following statements):

- Rural landscapes should balance modernization with preserving cultural heritage.
- The government's role in rural landscape development is crucial.
- Community engagement is vital for sustainable rural landscape planning.