NEW-QUALITY PRODUCTIVE FORCES AND AGRITOURISM INTEGRATION: INSIGHTS FROM GREENFOOD FARM

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Abstract: Taking Yantai Greenfood Farm as a case study, this research explores the integration mechanisms between new-quality productive forces and the agritourism industry in areas such as green and low-carbon development, digitalization, mechanization, and intelligentization. It focuses on analyzing practical applications of new-quality productive forces, including how intelligent breeding technologies enhance agricultural production efficiency, how ecological circulation models support low-carbon development, and the value creation pathways of integrated agritourism business formats. It identifies key challenges in industrial practice, such as ambiguous definitions of new-quality productivity technology applications and insufficient integration depth between agritourism formats and technologies, while proposing optimization directions and improvement suggestions. The technology application models and industrial integration pathways presented in this article can provide practical references for the high-quality development of the agritourism industry, thereby contributing to rural revitalization.

Keywords: New-quality productive forces; Agritourism industry development; Rural revitalization

1 INTRODUCTION

1.1 Research Background

New-quality productive forces signify an advanced form of productivity, with technological innovation at their core, characterized by high technology, efficiency, and quality. They provide a theoretical and practical framework for industrial transformation and upgrading, serving as a key driver for the high-quality development of the cultural and tourism industry [1]. The integrated development of agriculture, culture, and tourism is a scientific model for the transformation and upgrading of modern rural industries and the advancement of agricultural modernization. It is based on regional resources, prioritizes agricultural industrial development, centers on local culture, and adopts leisure tourism as its development path. This model achieves cross-boundary integration of technology, factors, and resources [2]. Since 2020, China's agritourism sector has entered a phase characterized by high-quality development and digital transformation. Under the dual influences of the comprehensive implementation of the rural revitalization strategy and the COVID-19 pandemic, the industry has entered a period of reflection and restructuring. Concurrently, the widespread adoption of digital technologies such as big data and artificial intelligence has laid the foundation for industrial upgrading. Against this backdrop, the industry is being reshaped, and industrial integration will continue to deepen.

Greenfood Co., Ltd. overcame seedstock challenges to establish China's largest Simmental cattle base. By implementing smart farming to boost efficiency and reduce consumption, it has created cultural tourism formats like Niududu Paradise, driving local employment [3]. Its development highlights the positive role of new productive forces, though challenges remain in balancing efficiency with user experience. Exploring its empowerment pathways holds significant implications for corporate upgrading and rural revitalization, providing a practical model for agritourism industry advancement under the rural revitalization strategy.

1.2 Current State of Domestic and International Research

1.2.1 Conceptual introduction

New-quality productive forces place innovation at their core, with digital information technology serving as a key driver. It integrates advanced technologies such as new energy and new materials as its main body, achieving autonomous innovation during development. This shifts away from traditional high-consumption, low-output models toward intelligent, green, and integrated development. The "quality" aspect emphasizes high standards and multifaceted efficiency. High quality encompasses not only superior product standards but also excellence across the entire production spectrum. It employs cutting-edge technologies to efficiently produce high-quality goods, meeting the demands of high-quality productivity development.

The integrated development of agriculture, culture, and tourism is grounded in regional resources, prioritizes agricultural industry growth, centers on local culture, and embraces leisure tourism as a developmental trend. Through cross-sector integration of technology, factors, and resources, it breaks down the fragmentation between agricultural, cultural, and tourism supply chains. This promotes deep integration across functional expansion, marketing, and value enhancement. This fosters cross-sector collaboration and resource sharing, emphasizing the synergistic mechanisms of agriculture, culture, and tourism in rural revitalization. By leveraging local geographical advantages and natural

resources, it actively builds integrated models for rural leisure tourism development. Through multi-level planning and design, it meets consumer service demands, representing a scientific development model for the transformation and upgrading of modern rural industries and the advancement of agricultural modernization.

1.2.2 International research landscape

Research by Fortunato et al. also highlights the significant role of information and communication technology (ICT) in tourism and hospitality development. Tourism enterprises should be commended for utilizing ICT and engaging with customers through cutting-edge technologies like social networks. ICT enables meticulous monitoring and deployment at low cost, requiring minimal technical expertise, thereby enhancing hotel economic efficiency [4]. Research by Vaz Serra, Pedro et al. further highlights ICT's substantial impact on tourism. Information aggregation, connectivity, and real-time synchronization facilitate the creation of smart tourism experiences. Within this framework, tourists can generate and refine data, tourists' digital footprints—such as using mobile devices to research itineraries, book accommodations, and post reviews—are collected. This not only assists travelers in accessing information but also adds value to the entire tourism ecosystem. Consequently, it drives innovation in competitiveness, strategy, management, and marketing within the tourism sector. By integrating stakeholders including tourists, hotels, and destinations, it fosters the creation of more distinctive and high-quality travel experiences [5].

Regarding sustainable tourism, Cerutti and Stefania's research indicates that artificial intelligence is becoming a key driver for sustainable tourism, particularly in fragile ecosystems like the Alps. Leveraging AI technology to optimize resource management, enhance visitor experiences, and support environmental conservation holds the potential to balance tourism development with environmental sustainability [6]. Scholars like Mauro Noemi also propose that as environmental sustainability gains prominence, aligning user preferences with green behaviors has become essential across multiple sectors, including tourism. Interest-based recommendation systems can guide users toward preferred itineraries, while leveraging green transportation options can steer them toward sustainable tourism management solutions [7].

Research by scholars such as Karl and Tomislav indicates that the widespread adoption of IoT technology can redesign and enhance the performance of all major business processes in the hospitality industry. It also holds significant utility in the tourism sector, where tourism and hospitality can leverage IoT to improve customer experiences, boost satisfaction, streamline operations, increase profits, and propel tourism toward a more sustainable future [8]. Furthermore, IoT devices enhance visitor safety and well-being by providing relevant services. Thus, technology-driven strategies redefine tourism practices while ensuring enduring environmental, social, and economic sustainability.

1.2.3 Current state of domestic research

Currently, academic research on New-quality productive forces empowering the development of agriculture, culture, and tourism primarily focuses on theoretical frameworks and implementation pathways. In terms of technological support, new-quality productive forces are based on emerging technologies such as the internet, big data, cloud computing, blockchain, and artificial intelligence. They can facilitate the transformation and upgrading of traditional production chains, enabling industrial advancement. Innovation permeates the entire development process of new-quality productive forces. In the applied research on information and digital technology, theoretical analyzes by Du Fengyi et al. indicate that new-quality productive forces can leverage digital technologies—such as smart agricultural machinery and data analytics platforms—to enable farmers to achieve real-time monitoring, precise control, and intelligent decision-making throughout the entire agricultural production process, significantly enhancing agricultural efficiency [9]. In Shi Xiongian's study on new-quality productivity empowering Yunnan Province's agritourism industry, it is proposed that new-quality productivity drives the diversified integration and collaborative innovation of the agritourism sector. Through the deep integration of agriculture, culture, and tourism, it forms a new industrial ecosystem, enhances the comprehensive benefits of the industry, and increases its market appeal [10]. In Wang Jinwei et al.'s study on New-quality productive forces empowering deep integration of cultural tourism within the rural revitalization framework, technological innovation within New-quality productive forces overcomes temporal and spatial constraints. It optimizes the allocation and reconfigures production factors—such as capital, technology, and information—during development, thereby expanding tourism industry boundaries. Concurrently, the integration of technology with labor tools enhances labor tool utilization efficiency and optimizes labor object allocation, achieving optimal resource allocation efficiency and maximized benefits [11]. Yang Shuo, by analyzing the coupling relationship between new-quality productive forces and the integration of agriculture, culture, and tourism in ethnic regions, points out that new-quality productive forces can break traditional industrial boundaries. Utilizing digital marketing and IP development, they promote the deep integration of agriculture, culture, tourism, and ecology, thereby advancing industrial upgrading and cultural inheritance [12].

2 APPLICATION AND CURRENT STATUS ANALYSIS OF NEW-QUALITY PRODUCTIVE FORCES AT GREENFOOD

2.1 Current Status of Greenfood's Livestock Industry Development

Aligning with the principles of new-quality productive forces, this study evaluates green and low-carbon development through indicators such as the prevalence and efficiency of clean energy use (e.g., biogas power generation, photovoltaic power generation); green agricultural technology application (e.g., waste recycling rates, green technology

coverage); and ecological farming practices (e.g., proportion of land cultivated without chemical fertilizers or pesticides).

As a domestic leader in dual-purpose beef cattle breeding, the company has built its core competitiveness through ecological circulation and breeding innovation, leading the industry in multiple metrics. In developing its livestock operations, it employs large-scale standardized farming, establishing China's largest Simmental cattle breeding base with a current inventory exceeding 6,700 head and a designed ultimate capacity of 15,000 head. Approximately eight high-standard smart barns have been constructed, with each cow equipped with an electronic ID tag. This enables real-time collection of 12 key metrics, including health data and milk production, facilitated by a proprietary smart management platform.

To reduce labor costs and minimize unnecessary human-animal contact during breeding and milking, Greenfood invested heavily in developing a series of intelligent farming systems. Collaborating with Longkou State Grid Power Supply Company, it implemented a comprehensive energy utilization plan to achieve full electrification throughout the farming process. Core facilities include a Swedish DeLaval rotary milking line, robotic automatic feeding systems, air-source heat pump temperature-controlled barns, and thermostatically controlled drinking troughs, which reduces labor costs by 60% compared to conventional methods.

For manure and wastewater treatment, Greenfood utilizes a nano-molecular membrane processing system. After dry-wet separation, manure can be recycled: Liquid components undergo multi-stage fermentation into organic liquid fertilizer for agricultural irrigation and crop spraying, while solids are processed through bio-aerobic composting with molecular membranes to produce bedding material for dairy cattle. This system reduces annual waste emissions by over 20,000 tons, earning the farm national recognition as an Ecological Farm and a Brucellosis-Free Zone. In scientific breeding practices, Greenfood collaborates with China Agricultural University to establish professor workstations and technology villages. It undertakes key national R&D projects under the 14th Five-Year Plan, having mastered core genetic breeding technologies for Simmental cattle. Its developed silage feed formula has gained multi-party recognition, while its beef cattle breeds achieve a slaughter yield of 63% and raw milk protein content exceeding 3.6%－surpassing EU standards. For dairy processing and milk distribution, Greenfood maintains stringent quality control across the entire supply chain. Dairy processing utilizes German GEA automated equipment with 316 food-grade piping throughout, processing 300 tons of fresh milk daily. The launch of A2 pure milk in 2025 significantly enhances milk quality. For dairy sales, the company innovates with an online "order anytime, door-to-door delivery" model. Field promotion managers cover every community within the delivery area, while cold-chain logistics enable 24-hour traceability, ensuring freshness and safety from farm to table.

2.2 Current Status of Greenfood's Agritourism Development

Leveraging its National 3A Tourist Attraction certification, Greenfood has developed a multifunctional complex featuring an agricultural science museum, industrial exhibition hall, forest petting zoo, and visual milking hall. Centered on bovine cultural IP, educational science programs, and pastoral experiences, it has become a new benchmark for integrated rural tourism.

Guided by green agriculture principles, Greenfood further advances eco-tourism development. Building upon natural resources like farmlands, forests, and grasslands, the company has developed tourism projects closely integrated with agricultural production－such as hands-on farming experiences and eco-picking－inviting visitors to participate directly in agricultural processes. This agriculture-meets-tourism model not only enhances the value of agricultural products but also allows tourists to experience the unique charm of agriculture coexisting harmoniously with nature.

In science education and field studies, Greenfood independently developed 80 field study courses covering four major modules, including agricultural and pastoral production and ecological awareness. These courses deeply align with the United Nations Sustainable Development Goals and Cambridge Environmental Education principles. With 30 professional field study instructors, the company annually hosts over 20,000 elementary and secondary school field study groups, establishing itself as a key field study base for Yantai's students. Its flagship IP, Niududu Paradise, stands as China's first non-mechanized amusement park themed around cattle. Blending Alpine pastoral esthetics, it features an 80-acre peony sea, a 200-acre pink muhly grass garden, and 12 themed zones including jungle adventures and adorable animal interactions, with daily visitor peaks exceeding 10,000.

Simultaneously, Greenfood actively pursues cross-industry collaborations with the cultural and creative sector, integrating local cultural elements into agricultural product design and tourism offerings. Through cultural innovation, it has developed cultural IPs like Niududu Lingqiaoqiao, launching a series of locally distinctive tourist souvenirs, handicrafts, and customized agricultural products that enhance cultural value. Centered on beef and dairy products, Greenfood offers distinctive goods and services, including pastoral living programs, photography bases, specialty dining zones, and starlit camping sites. Themed packages combine milking experiences, dairy product DIY workshops, and flower field photo spots. Collaborating with Huangshanguan Town government, it developed space capsule lodgings, creating a comprehensive tourism model featuring daytime sightseeing and overnight stays. By 2024, visitor numbers exceeded 100,000. The cultural tourism projects directly created over 80 jobs, engaging local villagers in roles such as tour guides and catering services. Through the scenic area + farmer model, surrounding villages like Yidong New Village have developed homestays and local specialty sales, generating over 5 million yuan in annual indirect income. This initiative has contributed to dual improvements in rural living environments and villagers' incomes.

3 GREENFOOD'S NEW-QUALITY PRODUCTIVE FORCES EMPOWERMENT PATHWAYS AND CHALLENGES ANALYSIS

The development of Yantai's Greenfood agritourism industry demonstrates the full application of new quality productive forces. It has achieved deep integration across the agriculture, tourism, and cultural creativity sectors while delivering significant results in technological innovation, green development, and digital transformation.

3.1 Implementation Pathways for Empowering Greenfood's Agri-Cultural Tourism Development Through New-quality Productive Forces

First, technology－as the core of new-quality productive forces－must serve as the foundation for agritourism development, driving the optimization and innovation of production factors. By prioritizing technological innovation as the foundation for industrial advancement, we can optimize and innovate agricultural, cultural, and tourism elements, foster deep integration between technology and these industries, and leverage technological breakthroughs to guide the optimization and transformation of these sectors.

Optimizing resource allocation is a key measure to enhance industrial operational efficiency. Greenfood leverages digital technologies and artificial intelligence to enhance the internal flow of production factors. On the one hand, the company continuously advances supply-side structural reform, supports innovation in new service products, drives the transition from old to new growth engines, eliminates outdated production capacity, increases the utilization rate of new energy, and elevates the modernization level across the entire industrial chain. On the other hand, Greenfood leverages cloud platforms and big data for precise market demand analysis, thereby reducing blind investment and redundant construction, improving resource allocation efficiency, integrating high-quality cultural tourism resources, and enhancing industrial competitiveness. Simultaneously, confronting the challenge of industrial chain restructuring, the agritourism sector requires continuous deepening of industrial transformation. Emerging technologies and novel models representing new productive forces continually emerge, providing abundant innovative resources for this sector. Greenfood leverages emerging technologies to drive the industry's transition toward high-end, intelligent, and green development. Harnessing technological power, it continuously stimulates the vitality of market entities, forming a synergistic industrial ecosystem [13].

Furthermore, emphasis should be placed on building industry brands and elevating market image. Greenfood leverages the internet, social media, and new media technologies to continuously enhance the visibility of its agritourism brand. Through channels like live streaming and e-commerce platforms, distinctive agricultural products and tourism resources can be promoted more rapidly to broader markets, attracting increased numbers of tourists and consumers. Enterprises should leverage diverse marketing methods emerging from new media, such as short videos and live-stream commerce, to showcase the unique appeal of their agritourism resources through online livestreams and mini-program operations. This fosters interaction with consumers and strengthens brand loyalty. Finally, emphasis must be placed on enhancing industry management and strengthening operational oversight. The application of technologies like big data analytics and cloud computing enables agritourism enterprises and managers to make more scientific management decisions. For instance, Greenfood precisely targets markets and improves management efficiency by analyzing data on tourist behavior, market demand, and resource utilization. Flexible business models can revitalize idle assets, ensure rational disposal of project assets, and guarantee efficient resource utilization.

The agritourism industry should also take integration as its foundation to continuously expand development space . By integrating online and offline platforms, it can pool diverse resources to form synergistic forces for enterprise development, broaden growth horizons, and drive deep integration and upgrading of the sector. A key pathway for Greenfood to expand its development space is the integration of online and offline platforms. With the rapid development of the internet, online platforms have become a vital channel for selling agricultural products, cultural and creative goods, and agritourism offerings. Greenfood enables enterprises to directly sell agritourism products to consumers through its e-commerce platform, reducing intermediate distribution processes and enhancing product conversion efficiency. Simultaneously, it establishes offline agritourism product stores to create distinctive agritourism products and experiences. Greenfood integrates educational, technological, and cultural resources to continuously elevate the value of the agritourism sector. Through collaborations with institutions like China Agricultural University, research organizations, and cultural groups, it consistently introduces cutting-edge agricultural technologies, cultural innovations, and tourism concepts into the industry. By partnering with universities, the company leverages specialized expertise in agricultural technology, tourism management, and cultural creativity to enhance its technical capabilities and service standards. Secondly, Greenfood can enhance visitor engagement and experiential appeal through science education tours and experiential sightseeing, thereby expanding market reach and boosting the attractiveness of agritourism.

Finally, advancing the agritourism sector must focus on establishing sustainable development models. This entails creating innovative operational frameworks aligned with contemporary trends and market demands, driving industrial innovation and transformation to achieve a virtuous cycle of economic, social, and environmental benefits.By creating agri-cultural tourism IP models and painting a new picture for the sector, Greenfood has developed distinctive IP carriers like Niududu Lingqiaoqiao, successfully driving traffic to agri-cultural tourism. Through meticulous online and offline operations, the company has elevated the value of its agri-cultural tourism IP. By continuously monitoring

visitor trends and coordinating brand strategies, the scenic area maintains freshness and relevance, strengthening the bond between the IP and its visitors and consumers [14].

Immersive agritourism experiences engage all five senses－visual, auditory, tactile, olfactory, and gustatory－to deliver comprehensive sensory information, enabling diverse interpretations and achieving true immersion. Building on this, Greenfood has pioneered immersive sightseeing and lodging experiences. First, immersive agricultural production experiences allow participants to reconnect with nature and return to the fields through hands-on farming activities. Second, immersive landscape experiences require integrating agricultural and cultural landscapes with smart technology to create interactive scenes between people and scenery. Third, immersive lodging experiences. For lodging, Greenfood has developed projects like starlit camping tents and transparent bubble cabins. By refining facilities and services around themes and local agricultural-cultural characteristics, the company integrates multiple elements and coordinates diverse resources to deliver comprehensive service offerings.

3.2 Analysis of Greenfood's Challenges in New-quality Productive Forces Empowerment

While new-quality productive forces present opportunities for high-quality rural cultural tourism development, challenges persist: shortages of applied digital talent, underdeveloped digital teams, weak sustainability in factor monetization, resource allocation gaps, insufficient high-quality tourism products, and outdated industrial structures. These bottlenecks hinder the transformation of rural cultural tourism productivity and impede its high-quality development.

New-quality productive forces are driven by technological innovation. Their essence lies in propelling the agricultural, cultural, and tourism industries from resource-driven to innovation-driven development through deep alignment of new technologies with industrial needs, comprehensive infrastructure upgrades, digital restructuring of operations management, precision-targeted brand marketing empowerment, and systematic talent ecosystem development. Although Greenfood Agri-Pastoral Technology Co., Ltd. has established a full industrial chain model integrating smart farming, ecological cultivation, and leisure tourism, demonstrating first-mover advantages in technological empowerment and cross-sector integration, it still faces development challenges aligned with common industry issues while possessing unique industrial characteristics during the deep penetration of new-quality productive forces into the agri-cultural tourism sector.

Regarding industrial innovation development, the core logic of new productive forces empowering content innovation in agritourism lies in leveraging technologies like AI, VR/AR, and big data to transform agricultural resources and regional culture into experiential, tangible specialty products. However, Greenfood faces issues of technological-demand mismatch and superficial integration in its agri-cultural tourism content innovation. From a technology adaptation perspective, while Greenfood has implemented digital equipment like electronic ID cards and TMR automatic feeding systems in its breeding operations, these technologies primarily focus on enhancing livestock production efficiency rather than extending to experiential design within agri-cultural tourism scenarios. For instance, its Cow Dudu Park and dairy cow interaction projects remain primarily sightseeing-based with simple activities. They fail to leverage VR/AR technology to recreate the full dairy farming process or utilize big data to customize personalized educational courses. Most science-based experiences involve basic tours, yet existing projects lack such technology-enabled differentiated content. This results in experiences that differ little from ordinary rural farms, making it difficult to establish a core appeal. This tendency to prioritize production-side technology while neglecting the cultural tourism side fundamentally stems from a mismatch between technological supply and visitor demand.

In terms of integration depth, Greenfood's agritourism model remains confined to a superficial framework where agriculture serves as the backdrop and tourism is merely an add-on. Its agritourism offerings build upon ranch sightseeing, layering on basic interactive experiences and dining services. They fail to transform core industrial assets－such as dual-purpose dairy and beef cattle breeding－and distinctive technological strengths like ecological circulation systems into the core of tourism products. The dairy processing segment could extend into immersive experiences like handmade cheese DIY workshops or dairy quality testing demonstrations, yet such content constitutes an extremely low proportion of existing offerings. Furthermore, enterprises have insufficiently explored regional culture, failing to integrate Yantai's local farming traditions and livestock heritage with ranch tourism. This results in projects lacking cultural distinctiveness, falling into the trap of uniformity－the cow interaction experiences at Greenfood are scarcely differentiated from similar offerings at other regional ranches, making it difficult to establish innovation points [15].

Regarding brand development and marketing obstacles, empowering agritourism brands with new productive forces requires precision targeting through big data and reaching new audience segments via new media. However, Greenfood remains at a superficial digital stage in brand building and marketing, resulting in limited brand recognition and market reach. In terms of brand positioning and premium pricing, its agri-cultural tourism brand lacks a core IP and clear customer segmentation. The company's agritourism brand centers around its ranch but has failed to establish a distinctive brand symbol. While Niududu Paradise possesses an IP prototype, it has not leveraged digital technology to deepen its brand image, resulting in low IP recognition. Simultaneously, the company's target audience positioning is ambiguous, attempting to attract both family groups and student/senior demographics. This results in product offerings that are broadly inclusive yet lack depth in any specific area. This lack of brand distinctiveness and customer focus forces the company to rely on low-priced tickets and discounted dining to attract visitors, leading to low average transaction values and repeat purchase rates. Consequently, it struggles to increase revenue through brand premium pricing.

4 CONCLUSION

The economy is advancing into a new phase of high-quality development. Traditionally homogeneous tourism products and services with uniform standards no longer meet tourists' increasingly diverse demands. Developing new-quality productive forces is an intrinsic requirement and key focus for driving high-quality development, holding significant importance for building a modern industrial system. New-quality productive forces empower the high-quality integration of agriculture, culture, and tourism, serving as a vital pathway to advance cultural and tourism development and construct a modern tourism industry system. They introduce new technologies, expand business models, shape new directions, and provide support for the high-quality integration of agritourism. The deep integration of new-quality productive forces with the agriculture-culture-tourism industry represents not only an inevitable trend of technological revolution but also an essential requirement for high-quality development.

In its further development, Greenfood Enterprise should adhere to a dual-strategy approach, deepen the integrated innovation of technology and services, promote technological innovation to enhance production efficiency and innovate customer consumption experiences, improve supporting infrastructure, accelerate the comprehensive implementation of key facilities such as smart ticketing systems, guided tour equipment, and passenger flow monitoring systems, strengthen training and education for frontline workers, and improve the production environment. Regarding cultural-tourism integration, actively explore AI applications in immersive educational experiences and personalized itinerary design. Leverage big data analytics for precise market segmentation targeting specific demographics and customer needs, enabling customized product offerings and targeted marketing. Strengthen IP media influence to enhance brand recognition and emotional value, building an integrated online-offline service ecosystem. Simultaneously, it is suggested that prioritizing deepening the integration of agriculture and tourism. This involves thoroughly exploring the core value of enterprises' distinctive cultivation techniques and ecological recycling models, transforming them into tangible, participatory experiential products to achieve the convergence of primary, secondary, and tertiary industries.

Driven by new-quality productive forces, the high-quality development of the agritourism industry has ushered in new opportunities. Only by dismantling institutional barriers through systemic reforms, invigorating development momentum with technological innovation, strengthening intellectual foundations through talent cultivation, and expanding value space through industrial integration can the agricultural sector achieve a qualitative leap from quantitative accumulation. Moving forward, it is essential to strengthen policy coordination, refine standard systems, and cultivate an innovation ecosystem. This will enable new-quality productive forces to truly become the core engine driving the high-quality development of cultural and tourism industries. It will propel the transformation, upgrading, and sustainable development of these sectors, thereby contributing to the construction of a leading cultural nation.

COMPETING INTERESTS

The authors have no relevant financial or non-financial interests to disclose.

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