

FROM FARM TO FINE DINING: THE IMPACT OF LOCAL SOURCING ON THE COMPETITIVENESS OF ROMANIAN LUXURY RESTAURANTS

Noémi Tordai (Pál)^{1*}, Beáta Tatár², Alexis-Monica Moga³, Flavia Dana Oltean⁴

¹George Emil Palade University of Medicine, Pharmacy, Science and Technology of Târgu Mureș, Târgu Mureș, Romania, pal.noemi.24@stud.umfst.ro

²George Emil Palade University of Medicine, Pharmacy, Science and Technology of Târgu Mureș, Târgu Mureș, Romania, tatar.beata.24@stud.umfst.ro

³George Emil Palade University of Medicine, Pharmacy, Science and Technology of Târgu Mureș, Târgu Mureș, Romania, moga.alexis-monica.25@stud.umfst.ro

⁴George Emil Palade University of Medicine, Pharmacy, Science and Technology of Târgu Mureș, Târgu Mureș, Romania, flavia.oltean@umfst.ro

Abstract

Sustainability has become a defining axis of innovation and competitiveness in the global fine dining sector, yet its translation into operational and managerial practices remains uneven, particularly in emerging markets. This study examines how sustainable gastronomy practices are integrated within a high-end rural hospitality context, using Bethlen Estates Transylvania as a single embedded case study. The research adopts a convergent mixed-methods design, combining semi-structured interviews with key stakeholders (executive chef, operations coordinator, garden manager, and a local supplier) and a complementary pilot survey (N = 140) assessing consumer awareness and willingness to pay for sustainability in fine dining. Qualitative data were analysed through thematic coding, while quantitative responses were processed descriptively, with internal consistency verified (Cronbach's $\alpha > 0.70$). Findings indicate that sustainable fine dining in a post-socialist, rural context requires not only ecological and ethical commitment, but also creative adaptation to infrastructural and perceptual constraints. In this case, sustainability functions both as a competitive strategy and as a narrative the restaurant constructs about itself – one that connects authenticity, locality, and value creation. The study contributes to the literature on sustainable gastronomy by offering a contextualised model of integration between environmental responsibility, luxury experience, and community-based sourcing. Limitations include the single-case design and non-probabilistic sampling. Future research should consider comparative multi-case analyses across the Central and Eastern European region.

Keywords: sustainable gastronomy, Michelin Green Star, proximate luxury, Romania, Bethlen Estates Transylvania

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1. Introduction

Sustainability has become increasingly prominent in discussions of the global hospitality sector over the past decade. Much of this attention arises from growing evidence that food systems contribute significantly to greenhouse gas emissions, resource depletion, and food waste (FAO, 2011; Crippa et al., 2021; UNEP, 2024). International organisations such as the IPCC (2022) and the World Bank (2022) argue that building more resilient agri-food systems requires action throughout the entire chain, from production and distribution to consumption. Restaurants operate at a critical intersection between production and consumption, as highlighted in several food system analyses (Crippa et al., 2021; IPCC, 2022).

Within fine dining, sustainability has gained particular visibility. With the introduction of the Michelin Green Star in 2020, environmental responsibility became formally recognised as part of culinary excellence.

* Corresponding author

Authors' ORCID:

Noémi Tordai (Pál)

Beáta Tatár

Alexis-Monica Moga

Flavia Dana Oltean

Restaurants that systematically implement practices such as local sourcing, waste reduction, biodiversity protection, and community involvement have received this distinction since its introduction (Michelin Guide, 2023). Several studies also suggest that these practices may support competitiveness by improving efficiency, strengthening trust, or creating a clearer brand identity (Iraldo et al., 2017; Bonfanti et al., 2025; Huang et al., 2025).

Even so, most current knowledge about sustainable gastronomy originates from Western European or urban contexts, where the gastronomic sector benefits from longer traditions and more developed infrastructure (Huang & Hall, 2023). Much less is known about how sustainability is understood and applied in emerging markets, where weaker infrastructure, limited policy support, and uneven consumer awareness are common. Empirical studies examining how these local characteristics influence sustainable practices in high-end restaurants are scarce.

This absence is even more pronounced in rural fine-dining contexts, where empirical studies remain limited (Paunić et al., 2024). Supply chains, labour availability, and consumer expectations differ substantially from those in large cities or established Michelin regions, making it unclear how global sustainability frameworks – especially the Michelin Green Star – can be translated into practice in a post-socialist rural environment. To address this gap, the present study examines how sustainability is implemented and perceived in a high-end rural hospitality setting. Bethlen Estates Transylvania was selected as a single embedded case study because it combines a visible commitment to sustainability with the structural constraints typical of rural areas.

Given the limited evidence on how sustainability frameworks operate in rural fine-dining environments, particularly in post-socialist contexts, this study addresses the following research questions:

RQ1: *How are sustainability principles implemented within the culinary, managerial, and supply-chain practices of Bethlen Estates Transylvania?*

RQ2: *How do internal stakeholders understand the relationship between sustainability, authenticity, and competitiveness in fine dining?*

RQ3: *How do consumers evaluate sustainability-related attributes in dining experiences and in their willingness to pay?*

RQ4: *Which contextual factors shape the integration of sustainability in a rural Romanian fine-dining environment?*

By addressing these questions, the article aims to demonstrate that sustainability in fine dining extends beyond environmental measures and constitutes a cultural and strategic approach to defining the identity and value of a restaurant in regions outside Western European gastronomic centres.

In addition to filling a visible gap in the literature by documenting a luxury rural restaurant in an emerging Central and Eastern European context, the study clarifies how operational practices, collaboration with the local community, and consumer perceptions intersect in a setting shaped by seasonality and infrastructural limitations. These insights are relevant for practitioners and policymakers seeking to understand the role of sustainability in competitive positioning and rural development.

The remainder of the article is structured as follows: Section 2 reviews existing research on sustainable gastronomy and the evolving relationship between sustainability and competitiveness in fine dining. Section 3 presents the methodological design, including the qualitative case study and complementary survey. Section 4 reports the empirical findings, integrating qualitative and quantitative evidence. Section 5 discusses theoretical and managerial implications, while Section 6 outlines the study's limitations and suggests directions for future research.

2. Literature Review

Sustainability has increasingly become a significant theme in hospitality research, as hotels and restaurants reconsider how their operations impact the environment and local communities. Several authors note that

sustainability is no longer seen solely as a moral responsibility; in many cases, it has become a strategic element that can enhance efficiency and strengthen a company's competitive position (Iraldo et al., 2017; Gössling & Hall, 2022). More recently, circular economy principles – such as energy-efficient technologies, waste reduction, and more careful sourcing – have been adopted to reduce operational costs and respond to changing consumer expectations (Maynard et al., 2021; Kusa et al., 2023).

In fine dining, these developments are particularly apparent. International guides such as the Michelin Guide and the World's 50 Best Restaurants have gradually incorporated sustainability criteria into their assessments. This shift reflects a broader trend in which environmental responsibility is closely linked to creativity and innovation in gastronomy (Huang et al., 2025). For many restaurants, sustainability now serves both as an ethical commitment and as a means of differentiating themselves in a competitive global market. This context also underpins the rise of the Michelin Green Star and its relevance for countries such as Romania.

The introduction of the Michelin Green Star in 2020 marked a significant shift in the definition of excellence in gastronomy. Restaurants that systematically implement sustainability – through local sourcing, close collaboration with producers, waste and energy reduction, biodiversity protection, or community involvement – can now receive this distinction (Michelin Guide, 2023; Huang et al., 2025; Gössling & Hall, 2022). Consequently, Green Star restaurants have become reference points in sustainability-related research. Several studies describe how the label enhances visibility, customer loyalty, and brand differentiation, while also encouraging restaurants to adopt more efficient cost structures (Huang & Hall, 2023; Iraldo et al., 2017). A comparative study of 355 Green Star restaurants shows that the most common practices are local and seasonal sourcing, followed by waste reduction, energy efficiency, sustainable menu design, and community engagement (Huang et al., 2025). These findings suggest that the Green Star is not merely symbolic, but is based on concrete operational commitments.

Changes in consumer attitudes have also contributed to the growing importance of sustainability. Research indicates that customers increasingly expect restaurants to communicate clearly about their sourcing, waste management, and environmental measures, and that transparency often strengthens trust (Bonfanti et al., 2025; Filimonau & Krivcova, 2017). As a result, sustainability is gradually shifting from a differentiating factor to a basic expectation, especially in luxury gastronomy. Studies also describe the “experience effect”, where visible sustainability practices – such as on-site gardens, composting, or producer collaborations – enrich the dining experience and create stronger emotional connections with the brand (Filimonau & Krivcova, 2017).

Although Romania has a rich agricultural and culinary heritage, systematic research on sustainability in its HoReCa sector remains limited. Many rural areas benefit from artisanal skills, biodiversity, and traditional production methods, yet these resources are often fragmented and not fully integrated into restaurant operations (Paunić et al., 2024). Some emerging examples illustrate the potential for more coherent sustainable practices. Bethlen Estates Transylvania, Valea Verde, and Fork Restaurant Bálványos employ farm-to-table approaches, collaborate with local producers, and apply zero-waste strategies while also contributing to rural employment. Bethlen Estates, for example, uses produce from its pesticide-free garden, composts its organic residues, and works with nearby villagers for cheese, honey, and forest fruits. These practices support a localised circular economy and reduce the ecological footprint of fine dining.

Similar trends are evident in Central Europe. Salt Budapest and Graefl Major in Hungary combine fine dining with foraging and biodynamic agriculture, while Slovenia's Hiša Franko is a well-known international example of sustainable fine dining based on local sourcing and zero-waste principles (Gössling & Hall, 2022). These regional cases demonstrate that Romania also has the potential to position itself within Europe's sustainable gastronomy landscape. In addition to well-known restaurants, rural areas feature small-scale systems – honey cooperatives, mushroom-picking networks, and heritage grain projects – that could support short supply chains for fine dining if coordination and logistics improve.

To analyse the role of sustainability in fine dining, this study uses a three-dimensional analytical framework that includes ecological, economic, and social perspectives. The framework reflects the principles of the UN Sustainable Development Goals (United Nations, 2015) and aligns with established hospitality research (Iraldo et al., 2017; Maynard et al., 2021; Gössling & Hall, 2022). Ecological sustainability refers to actions that aim to reduce environmental impact, such as waste minimisation, energy efficiency, biodiversity protection, or carbon footprint control. Economic sustainability focuses on the long-term viability of these practices through cost–benefit considerations, risk management, and differentiation. Social sustainability includes community involvement, fair working conditions, collaboration with local producers, and consumer education on ethical gastronomy.

By integrating these dimensions, the framework helps analyse both the operational realities observed in the case study and the perceptions identified in the consumer survey. It also provides a way to connect micro-level practices with broader consumer expectations, supporting a more complete understanding of sustainable gastronomy in the Romanian context.

3. Methodology

The study employs a convergent parallel mixed-methods design (Creswell & Plano Clark, 2017). Qualitative and quantitative data were collected simultaneously, analysed separately, and integrated during the interpretation stage. This approach was selected because the qualitative strand provides a detailed understanding of how sustainability is implemented at Bethlen Estates Transylvania, while the quantitative strand offers insights into consumer awareness, attitudes, and willingness to pay for sustainable dining in Romania. Triangulating these two strands enables exploration of how sustainability influences competitiveness, reputation, and market positioning in a fine-dining context.

The qualitative component adopts an embedded single-case design (Yin, 2014) and is based on semi-structured interviews with four key stakeholders at Bethlen Estates Transylvania. The case was purposively selected, following typical qualitative sampling logic (Eisenhardt, 1989; Yin, 2014). Several criteria guided the selection: the rural location with on-site agricultural production, the restaurant’s fine-dining profile, its explicit commitment to sustainability, and the feasibility of conducting fieldwork. Although the estate had not formally applied for Michelin recognition at the time of data collection (2025), its operational practices closely align with the Michelin Green Star framework (Michelin Guide, 2023), making it a suitable exploratory case for analysing sustainability implementation in Romania.

Semi-structured interviews were conducted with the executive chef, operations coordinator, garden manager, and a local supplier. The interview guide covered topics such as sustainability motivations, relationships with producers, seasonality, labour challenges, and guest expectations. All interviews were audio-recorded with consent and transcribed. Data were analysed using reflexive thematic analysis (Braun & Clarke, 2019), following the six stages: familiarisation, initial coding, theme generation, theme review, theme definition, and final write-up. The main qualitative themes and illustrative excerpts are summarised in Table 1.

Table 1. Qualitative Themes and Illustrative Evidence

Theme	Initial Codes	Illustrative Excerpt	Sustainability Dimension
Zero waste and circularity	composting; reuse; portioning	“Even a carrot peel isn’t garbage - it’s flavour. What’s left goes to compost.” (R1)	Ecological
Food self-sufficiency and seasonality	garden produce; preservation; menu sync	“We don’t plan the menu until we see what the garden offers.” (R3)	Ecological / Economic
Local partnerships and traceability	villager suppliers; artisanal cheese; direct purchase	“We know who made the cheese and where the honey came from.” (R4)	Social / Economic

Theme	Initial Codes	Illustrative Excerpt	Sustainability Dimension
Systemic management and efficiency	logistics; smart energy; planning	“Sustainability isn’t a department - it’s how we operate.” (R2)	Economic / Ecological
Community inclusion and education	hiring locals; storytelling; guest interaction	“We hire and train villagers; we explain these values to guests.” (R2)	Social
Challenges and resilience	seasonality; labour shortages; innovation	“Winter is hardest - we rely on fermentation and creativity.” (R3)	All dimensions

Source: Author’s own research (2025)

The thematic analysis indicates that Bethlen Estates Transylvania employs a holistic sustainability model, integrating ecological, economic, and social practices across its operations. Key strengths include zero-waste kitchen processes, local sourcing partnerships, and community-based employment, reflecting a regenerative approach consistent with the Michelin Green Star philosophy (Michelin Guide, 2023).

The quantitative component of the study is based on an online questionnaire distributed via Google Forms from 1 to 15 March 2025. The target population comprised Romanian adults aged 18 and above. A total of 145 responses were collected, with 140 retained after removing incomplete questionnaires (completion rate = 83%). The sampling technique was non-probabilistic convenience sampling, appropriate for exploratory studies aiming to identify patterns rather than provide statistical representativeness (Etikan et al., 2016).

The questionnaire comprised four sections: demographic information; basic awareness of the Michelin Green Star (yes/no); six Likert-scale items assessing attitudes towards sustainable dining; and three items measuring willingness to pay (WTP). All scale items were adapted from previously validated instruments (Filimonau et al., 2017; Reinders et al., 2020; Bonfanti et al., 2025). Internal consistency was assessed using Cronbach’s alpha. The internal reliability coefficients for each construct are reported in Table 2.

Table 2. Internal consistency test

Construct	No. of Items	Cronbach’s α
Attitudes toward sustainable dining	6	0.914
Willingness to Pay (WTP)	3	0.907

Source: Author’s own research (2025)

Both constructs exceeded the 0.70 threshold recommended for exploratory research (Nunnally & Bernstein, 1994), and Cronbach’s α was above 0.90 in each case. This suggests that the items measure coherent underlying attitudes. Descriptive results show moderately positive attitudes towards sustainable dining ($M = 3.56$, $SD = 1.18$) and a similar willingness to pay ($M = 3.66$, $SD = 1.16$). Prior awareness of the Michelin Green Star was low (35.2%), indicating limited familiarity with sustainability certifications in Romania. Descriptive statistics for all scale items (attitudes and willingness to pay) are reported in the Results section (Tables 5 and 6).

Ethical procedures were followed throughout the research. Participation was voluntary, interviewees provided written consent, and survey responses were anonymous. Respondents were informed of the study’s academic purpose, and no personal identifying data were collected. The study complies with GDPR regulations (European Parliament and Council of the European Union, 2016) and ethical guidelines recommended by the United Nations (2015) and UN Tourism (2023). Given its low-risk nature and absence of sensitive data, formal IRB approval was not required, consistent with similar hospitality research.

After analysing each component separately, the findings were integrated using convergent triangulation (Creswell & Plano Clark, 2017). The aim of this step was to compare operational perspectives at Bethlen Estates Transylvania with consumer perceptions. Several consistent points emerged: both stakeholders and consumers emphasised local sourcing and waste reduction as central elements of sustainability, and both associated locality with authenticity. However, divergences also appeared. Staff described sustainability as

a long-term investment, but consumers' willingness to pay, while positive, was moderate and varied considerably. Awareness of the Michelin Green Star was particularly low compared to the estate's operational readiness.

A systematic cross-comparison confirmed these patterns. Codes such as “transparency”, “local sourcing”, and “waste minimisation” were aligned with corresponding survey items (e.g., “Restaurants should communicate sustainability transparently”). Convergences supported the validity of the mixed-methods approach, while divergences highlighted areas for improved communication and consumer education (Creswell & Plano Clark, 2017).

The study has several limitations. As a single case, the findings are context-specific and cannot be generalised to all Romanian restaurants. Convenience sampling limits representativeness, and self-reported measures may not fully correspond to actual behaviour. The interview sample is small ($n = 4$), although sufficient for data saturation on the themes investigated. Finally, the cross-sectional design captures only one moment in time and does not reflect potential changes in practices or perceptions. Despite these limitations, the combined qualitative and quantitative approach provides depth and triangulation, establishing a robust empirical foundation for understanding sustainability as both an ethical choice and a strategic opportunity in Romanian fine dining.

To clarify the construction of the quantitative strand, further details about the survey instrument are provided here. The questionnaire comprised four sections. The first section gathered demographic information (gender, age group, residence, and education). The second section assessed basic awareness of the Michelin Green Star with a single yes/no item. The third section measured attitudes towards sustainable dining using six Likert-type statements (1 = strongly disagree; 5 = strongly agree). These items captured respondents' views on transparency, waste reduction, local sourcing, support for local producers, authenticity, and trust in ecological certifications. The fourth section evaluated willingness to pay (WTP) using three statements measuring the extent to which guests prioritise sustainability over price.

All items were adapted from previously validated scales used in hospitality and sustainable consumption research (Filimonau et al., 2017; Reinders et al., 2020; Bonfanti et al., 2025). Example items include: “Restaurants should communicate sustainability transparently”; “Sustainable practices make dining more authentic”; “I would choose a sustainable restaurant even if it were more expensive.” Internal consistency was evaluated using Cronbach's alpha, as shown in Table 2. Both constructs demonstrated high reliability ($\alpha = 0.914$ for attitudes; $\alpha = 0.907$ for WTP), exceeding the commonly recommended threshold of 0.70 for exploratory studies (Nunnally & Bernstein, 1994). These values indicate that the items within each construct measure coherent underlying perceptions. To ensure clarity and appropriate targeting, the survey applied simple inclusion and exclusion criteria: inclusion criteria were Romanian residents aged 18 or older who completed the full questionnaire; exclusion criteria were incomplete responses, duplicate submissions, and respondents under 18 years of age.

This structure ensured that the survey captured a broad yet relevant picture of consumer perceptions regarding sustainable fine dining in Romania.

4. Results

4.1 Case study findings: sustainability practices at Bethlen Estates Transylvania

The analysis of the four semi-structured interviews (R1–R4) identified several recurring themes that illustrate how sustainability is implemented at Bethlen Estates Transylvania. Collectively, these themes demonstrate that sustainability functions both as an ethical orientation and as a managerial framework in the estate's daily operations.

The first theme relates to a zero-waste philosophy and careful resource use. All participants mentioned efforts to avoid waste at every stage of production. As the executive chef stated, “Even a carrot peel is not garbage – it still has flavour. What is left goes to compost” (R1). The operations manager described specific

measures such as standardised portion sizes, the elimination of single-use plastics, and the reuse of by-products through fermentation and composting. These practices reflect circular economy principles discussed in hospitality sustainability research (Filimonau et al., 2017; Iraldo et al., 2017) and align with Michelin Green Star criteria (Huang et al., 2025).

A second theme concerns food self-sufficiency and adaptation to seasonal changes. The pesticide-free garden and orchard provide a large proportion of the ingredients used in the kitchen, while preserved products such as ferments, pickles, and dried items play a greater role in winter menus. As the garden manager explained, “Seasonality decides the menu; we build dishes around what the garden and forest can offer” (R3). This approach aligns with closed-loop food systems and seasonal resilience strategies discussed in the sustainable gastronomy literature (Gössling & Hall, 2022).

A third theme is the deep integration with local supply networks. The estate collaborates closely with village-based artisans who provide cheese, honey, and forest products. One supplier noted, “They have been buying from me for years. They visit, they understand the process – that matters” (R4). Stakeholders estimated that 85–90% of ingredients are sourced locally. These relationships represent forms of relational capital and trust-based supply chains, which are considered important conditions for long-term sustainability (Huang & Hall, 2023; Kusa et al., 2023).

A fourth theme highlights transparent communication and guest education. Interviewees described how guests learn about sourcing and preparation through garden tours, menu storytelling, and direct interaction with the chef. “When guests ask why the soup tastes so rich, we explain the ingredients and processes,” said R1. This narrative transparency aligns with consumer expectations in sustainable fine dining (Reinders et al., 2020; Bonfanti et al., 2025) and contributes to trust and perceived authenticity.

A fifth theme concerns operational challenges and adaptive strategies. Participants mentioned constraints related to seasonality, shortages of skilled labour, and higher costs associated with artisanal ingredients. However, these difficulties were often seen as opportunities for innovation. As R1 observed, “Constraints force creativity; preservation techniques and unique dishes came from that.” R3 added that when frost shortens the growing season, preserved products “keep the flavours alive and the menu coherent.” This reflects a form of adaptive sustainability, where innovation arises in response to environmental and resource limitations (Maynard et al., 2021).

Beyond these specific practices, interviewees also described sustainability as something that must be continuously maintained. “Sustainability is not a project – if we stop, the system unravels; it has to live in every prep list,” explained R2. A local supplier emphasised the social and economic aspects: “They pay fairly and plan ahead; that lets me invest in better tools and animal feed” (R4). These micro-narratives suggest that sustainability at Bethlen Estates Transylvania is supported as much by human relationships as by environmental design, echoing relational and systemic perspectives in circular economy research (Bocken et al., 2016; Gössling & Hall, 2022). The main sustainability practices identified in the interviews are summarised in Table 3.

Table 3. Summary of sustainability practices observed at Bethlen Estates Transylvania (n= 4)

Practice category	Specific practices	Frequency
Waste reduction	Composting; root-to-leaf / nose-to-tail; careful portioning	4/4
Local sourcing	85–90% local ingredients; artisan partnerships	4/4
Food self-sufficiency	On-site pesticide-free garden; seasonal menus	3/4
Energy efficiency	Efficient equipment; monitoring (no on-site renewables yet)	2/4
Community engagement	~90% local staff; direct purchases from villagers	4/4
Transparent communication	Website, menu cues, garden tours, chef–guest dialogue	4/4

Source: Author’s own research

Overall, the case illustrates a holistic, place-based model of sustainability grounded in locality, circularity, and collaboration with the surrounding community. This profile closely aligns with the philosophy of Green

Star and the principles of regenerative hospitality (Gössling & Hall, 2022; Huang & Hall, 2023). The demographic characteristics of the survey respondents are presented in Table 4.

Table 4. Sample characteristics (Demographics, n= 145)

Variable	Category	n	%
Gender	Female	75	51.7
	Male	70	48.3
Age group	18–29	43	29.7
	30–44	36	24.8
	45–60	33	22.8
	60 +	33	22.8
Residence	Rural	87	60.0
	Urban	58	40.0
Education	Primary/Lower secondary	44	30.3
	High school	47	32.4
	University	36	24.8
	Postgraduate	18	12.4

Source: Author's own research (2025)

4.2 Consumer survey findings

The survey generated 145 usable responses, with 140 containing complete data for the Likert-scale items. The gender distribution is nearly balanced (51.7% female, 48.3% male), and a relatively high proportion of respondents live in rural areas (60%). This contrasts with many hospitality studies, which often rely on predominantly urban samples (Etikan et al., 2016; Hair et al., 2019). Respondents' attitudes toward sustainable gastronomic practices are summarised in Table 5.

Table 5. Respondents' attitudes toward sustainable gastronomic practices

Item	M	SD
Restaurants should communicate sustainability transparently	3.58	1.08
It is important for restaurants to reduce food waste	3.45	1.20
Preference for local and seasonal ingredients	3.52	1.17
Restaurants should support local producers	3.61	1.21
Sustainable practices make dining more authentic	3.59	1.27
I trust restaurants with ecological certifications	3.61	1.20
Overall mean (Attitudes)	3.56	—

Source: Author's own research (2025)

On average, respondents expressed moderately positive pro-sustainability attitudes ($M = 3.56$, $SD = 1.18$). The highest mean scores were for supporting local producers and trusting restaurants with ecological certifications, consistent with international findings that highlight transparency and authenticity as key sustainability attributes in dining experiences (Bonfanti et al., 2025; Reinders et al., 2020). The three-item willingness-to-pay (WTP) scale also showed excellent reliability (Cronbach's $\alpha = 0.907$). The results for consumers' willingness to pay for sustainable dining are reported in Table 6.

Table 6. Willingness to pay for sustainable dining experiences

Item	M	SD
I am willing to pay more for a sustainable dining experience	3.41	1.18
I would choose a sustainable restaurant even if it were more expensive	3.78	1.14
Price is less important than ecological impact	3.78	1.17
Overall mean (WTP)	3.66	-

Source: Author's own research (2025)

4.3 Integration of findings: convergences and divergences

When the qualitative and quantitative findings are considered together, both areas of convergence and divergence between stakeholder practices and consumer perceptions become visible. Both stakeholders and

consumers prioritise locality and authenticity, which represent the strongest points of overlap. Staff at Bethlen Estates Transylvania emphasise the importance of using local ingredients and building long-term relationships with nearby producers, while the survey results show positive attitudes towards local and seasonal products and support for local producers ($M \approx 3.5$ – 3.6). Waste minimisation is another clear point of alignment: the estate's zero-waste practices correspond to strong agreement that restaurants should reduce food waste ($M = 3.45$). Transparency also emerges as a common theme. Garden tours, menu storytelling, and chef–guest interaction match respondents' expectations that restaurants should communicate their sustainability practices clearly ($M = 3.58$).

Divergences are most evident regarding certification awareness and economic considerations. Although the estate already operates in a manner closely aligned with Michelin Green Star criteria, only about one-third of respondents recognise the label. This suggests that operational readiness exceeds consumer awareness. A second gap concerns cost and value. Stakeholders describe sustainability as a long-term investment in quality and reputation, but survey responses indicate only moderate and rather varied willingness to pay ($M = 3.66$; $SD \approx 1.15$), indicating price sensitivity in the market. The alignment and divergences between stakeholder practices and consumer perceptions are summarised in Table 7.

Table 7. Convergence–divergence matrix: alignment between stakeholder practices and consumer perceptions (mixed-methods triangulation)

Analytical Dimension	Qualitative Evidence (Bethlen Estates Transylvania)	Quantitative Evidence (Consumer Survey)	Interpretation
Local sourcing & authenticity	85–90 % local ingredients; partnerships with village producers and artisans (R2, R4)	High support for local/seasonal ingredients ($M = 3.52$); authenticity valued ($M = 3.59$)	Strong convergence – authenticity links ethics and competitiveness
Zero-waste & efficiency	Composting, fermentation, portion control, no single-use plastics (R1, R2)	Waste reduction seen as key ($M = 3.45$)	Full alignment - most visible sustainability practice
Community engagement	90 % local staff; ongoing collaboration with local farmers (R2)	Value placed on support for local producers ($M = 3.61$)	High convergence - local ties enhance social trust
Transparency	Storytelling, garden tours, menu notes (R1)	Transparency highly rated ($M = 3.58$)	Convergence - transparency drives trust and differentiation
Certification awareness	No certification yet; preparing alignment	Only 35.2 % aware of Green Star	Divergence - operational readiness > consumer awareness
Economic viability & WTP	Local ingredients increase costs; waste reduction offsets part (R1, R2)	Moderate WTP ($M = 3.66$; $SD \approx 1.15$)	Partial alignment - price sensitivity limits adoption
Innovation & adaptive capacity	Seasonality and labour shortages drive creative solutions	Innovation inferred through authenticity and quality	Convergence - innovation seen as part of ethical excellence

Source: Author's own research (2025)

Consumers reported a moderate willingness to pay more for sustainable dining experiences ($M = 3.66$). However, the relatively high standard deviations (approximately 1.15) indicate variation in price sensitivity. This illustrates the “value–cost tension” described in the sustainable consumption literature, where moral approval of sustainability does not always result in a substantial price premium (Chaturvedi et al., 2022; Kusa et al., 2023).

Overall, these convergences and divergences demonstrate that sustainability can act as a strategic differentiator for Bethlen Estates Transylvania. However, realising its full market value depends on

enhancing public understanding of both certifications and specific practices, and on communicating in ways that make the benefits of sustainability more visible and meaningful for guests.

5. Discussion

The findings of this study illustrate how sustainability is interpreted and implemented in a rural fine-dining context, and how these operational practices correspond to consumer perceptions in Romania. The case of Bethlen Estates Transylvania demonstrates that sustainability can function as an ethical principle, a managerial framework, and a source of culinary creativity. Practices such as zero-waste cooking, seasonal self-sufficiency, and close collaboration with local suppliers reflect a holistic approach grounded in circularity and community partnership, in line with the Michelin Green Star philosophy (Michelin Guide, 2023; Huang et al., 2025). The estate's rural location facilitates these practices by offering proximity to producers, access to high-quality agricultural products, and the opportunity to design menus based on seasonal variation. These factors support the view expressed by Gössling and Hall (2022) that rural fine-dining establishments often possess inherent sustainability advantages.

In the interviews, participants spoke openly about typical rural challenges – a small pool of workers, higher prices for artisanal products, and seasonal uncertainty – but they tended to describe these not as obstacles, but as factors that encourage them to be more inventive. Preservation practices such as fermentation, drying, and pickling enable chefs to work with seasonal abundance while maintaining menu coherence throughout the year. This is consistent with findings by Bonfanti et al. (2025), who emphasise that constraints often stimulate creativity and reinforce authenticity in sustainable gastronomy.

Survey results complement the case study by providing a broader perspective on consumer expectations in Romania. Respondents expressed moderately positive attitudes towards sustainable dining ($M = 3.56$) and a similar level of willingness to pay ($M = 3.66$). The preference for local ingredients and support for waste reduction reflect international trends, which suggest that transparency, authenticity, and proximity to producers are among the most valued attributes of sustainable dining experiences (Reinders et al., 2020; Bonfanti et al., 2025). However, awareness of the Michelin Green Star remains low (35.2%), indicating that international sustainability labels have limited visibility in Romania. This pattern is consistent with studies from emerging markets, where cultural familiarity and trust in local products often outweigh institutional certification (Chiang & Chen, 2021; Marquez Garat, 2022).

One of the central ideas emerging from this study is the concept of proximate luxury. Rather than relying on rare or imported ingredients, exclusivity at Bethlen Estates Transylvania derives from temporal proximity (seasonality), spatial proximity (locality), and ethical proximity (transparent sourcing, fair collaboration, and traceability). This interpretation reflects recent conceptual debates suggesting that sustainable luxury gastronomy redefines value by emphasising ecological and cultural closeness rather than extravagance (Gössling & Hall, 2022; Huang & Hall, 2023). The estate puts this idea into practice through visible authenticity mechanisms – garden tours, ingredient storytelling, and visits to producers – which transform sustainability from an operational principle into an experiential component of the dining experience.

Taken together, these findings indicate that sustainability in Romanian fine dining is both feasible and valued, but remains limited by gaps in communication, certification awareness, and price sensitivity. Closing these gaps will depend on aligning restaurant practices more closely with what guests actually recognise and understand.

6. Conclusions

This research examined the integration of sustainability into Romanian luxury gastronomy through a mixed-methods analysis, combining a qualitative case study of Bethlen Estates Transylvania with a survey of 140 consumers. The results show that sustainability serves as an ethical imperative, an operational strategy, and a source of competitive differentiation. The estate demonstrates that rural fine dining can successfully incorporate local sourcing, zero-waste principles, and community collaboration in ways that align with

Michelin Green Star criteria. Consumers value locality, freshness, and authenticity, and display a moderate willingness to pay for sustainable dining, although awareness of certification remains low.

The study also highlights the concept of proximate luxury, where exclusivity derives from temporal, spatial, and ethical closeness rather than rare ingredients or overt opulence. This suggests that sustainability can reshape current understandings of luxury. Romania's agricultural heritage and artisanal traditions provide fertile ground for cultivating this model on a wider scale.

Scaling such practices will require stronger communication, clearer sustainability narratives, and collaboration among restaurants, policymakers, producers, and consumers. By connecting global sustainability frameworks with Romania's rural authenticity, the findings illustrate how the pursuit of gastronomic excellence can contribute to competitiveness, community development, and international recognition.

The combined evidence presents several implications for restaurant operators, policymakers, and future researchers. For fine-dining practitioners, sustainability should be central to a restaurant's identity rather than a secondary marketing tool. Local sourcing, transparent communication, and visible community involvement enhance authenticity and contribute to competitive differentiation (Iraldo et al., 2017). The findings indicate that narrative-based communication – such as supplier maps, garden tours, menu descriptions, and digital storytelling – can help translate operational sustainability into perceived value. Restaurants in rural areas may benefit from their proximity to producers by developing farm-to-table experiences and collaborations that support both traceability and community development (UN Tourism, 2023). Managing seasonality through preservation techniques (fermentation, drying, pickling) can also reduce volatility and strengthen menu cohesion.

For policymakers and tourism authorities, the results highlight the need to support sustainable gastronomy as part of national tourism strategies. Facilitating access to sustainability certifications, strengthening short supply chains, and promoting rural culinary networks can increase resilience, create employment, and enhance Romania's international visibility (FAO, 2021; World Bank, 2022). Supporting producer–restaurant collaborations through grants or training initiatives can also help build long-term rural capacity.

Future research could expand this study in several directions. Multi-case comparative designs across different Romanian regions would help identify varied models of sustainability integration. Longitudinal approaches would capture how consumer awareness and operational practices evolve over time. Including financial indicators such as cost-benefit ratios or ROI would also clarify the business case for sustainability, complementing the qualitative and perceptual evidence presented here (Iraldo et al., 2017). Representative sampling methods could further strengthen external validity by capturing socio-economic differences in consumer expectations.

Several limitations should be considered when interpreting the findings. As a single case, the qualitative component reflects the specific context of Bethlen Estates Transylvania and cannot be generalised to the entire Romanian fine-dining sector. The survey relies on convenience sampling, which introduces potential self-selection bias, although the rural and age-diverse composition of the sample increases contextual relevance. Attitudinal measures are self-reported and may differ from actual purchasing behaviour. The absence of financial performance data prevents conclusions about profitability. Finally, the cross-sectional design provides only a snapshot in time and does not capture seasonal or long-term dynamics.

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Appendices

Appendix A

Interview Guide

This appendix presents the interview guide used in the qualitative component of the study. The semi-structured interview guide used in the study included the following thematic blocks:

1. Motivations for sustainability
2. Operational sustainability practices (sourcing, waste, seasonality)
3. Collaboration with local producers and suppliers
4. Communication with guests (transparency, storytelling)
5. Challenges and constraints (seasonality, labor)
6. Future development of sustainability practices

This guide was applied consistently across all four interviews.

Appendix B

Interview Data Overview

Additional details from the interview data are summarised in Table 8 within this appendix. Four interviews were conducted with key stakeholders at Bethlen Estates Transylvania.

All interviews were recorded with consent and anonymised.

Representative quotations (anonymised and coded):

- “Even a carrot peel isn’t garbage - what’s left goes to compost.” (R1)
- “Seasonality decides the menu; we build dishes around what the garden offers.” (R3)
- “We know who made the cheese and where the honey came from.” (R4)
- “Sustainability isn’t a department - it’s how we operate.” (R2)

These quotations correspond to the themes presented in the Results section.

Table 8. Interview Data Overview

Respondent Code	Role	Duration (minutes)	Month (2025)
R1	Executive Chef	58	March
R2	Operations Coordinator	46	March
R3	Garden Manager	52	March
R4	Local Supplier	37	March

Source: Author’s own research (2025)