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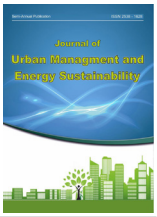

CASE STUDY RESEARCH PAPER

Explaining the pleasant indicators of eco-architecture and its impact on residential and tourism complexes (Case Study: Yaseh-Cahy Village)

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ABSTRACT

Tourism stands as a globally essential industry that drives economic growth, creates employment, and supports regional development and sustainability. By leveraging innovative technologies, culturally meaningful design, infrastructure investment, and digital marketing, it seeks to balance environmental, cultural, and economic objectives. The notion of "delights" in tourism points to destinations with distinctive, strong appeal that shape mental images and offer competitive advantages; maintaining this appeal, however, requires careful planning and clear differentiation. The type of the present research is descriptive-analytical and is applied in purpose, at the same time, it has a developmental nature due to the study of the course of the foundations and concepts. The paradigm of the present research is interpretive and has a qualitative research design. The method of collecting information is documentary and field, and the survey method was used to collect data. First, in the first step, after examining the general concepts related to the subject, the three indicator resulting contains, human and comfortable spaces, harmony with natural and cultural environment and continuous and cohesive design are briefly examined in order to evaluate the three indicator. The aim of the present research is to explain the pleasant indicators in eco-architecture with an emphasis on tourist complexes in the village of Yaseh-Chay. The statistical population consists of 200 residents and a researcher-made questionnaire is used randomly. Findings show that average score for all three indicators is 69, 68, and 70, respectively, and consequently, the continuous and cohesive design criterion has the most importance in the pleasant components of rural architecture. The results indicate that integrated interpretation aligns with contemporary urban design research that emphasizes place-based strategies, adaptive comfort, and culturally informed ecologies, reinforcing the case for iterative, data-driven design governance that centers resident experience and environmental compatibility

Running Title: The pleasant indicators of eco-architecture

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INTRODUCTION

In recent decades, attention to sustainable architecture that relies less on non-renewable resources has become a central pillar of both rural and urban development. This shift not only reduces the environmental footprint of buildings but also enhances the quality of life for residents and the appeal of destinations for visitors. (Touloun & Eddali, 2023) Globally, the concept of eco-architecture, with its broad social, economic, and environmental implications, has emerged as a new language for designing humane spaces. Contemporary research indicates that applying sustainable design principles at the village scale can help preserve cultural heritage, increase resource efficiency, and create jobs linked to sustainable tourism. (Van De Schoot et al., 2015, Zhang et al., 2019)

In rural contexts, the emergence of eco-architecture is not merely a technical shift but a cultural one, reframing how communities perceive their relationship with the surrounding landscape and resources. It invites residents to participate in adaptive practices that respect traditional knowledge while embracing innovative, low-impact technologies. This convergence fosters a sense of stewardship where architectural choices become expressions of place, identity, and collective responsibility toward future generations. (Suharyono & Digdowiseiso, 2023, Suhartanto et al., 2020) By foregrounding resilience, flexibility, and local craftsmanship, eco-architecture in villages can support livelihoods that are both environmentally sustainable and culturally authentic. (Stefănică et al., 2021) Another dimension concerns governance and policy alignment. Successful implementation requires clear institutional support, accessible financing mechanisms, and local capacity-building that empower villagers to design, maintain, and adapt eco-friendly interventions. (Stylidis, 2017)

When policies incentivize resource efficiency, water conservation, and energy-conscious building standards, the cost of adopting sustainable practices becomes more manageable for households and small enterprises. This alignment between policy, markets, and community aspirations helps ensure that eco-architectural strategies translate into durable improvements in living conditions, tourism experiences, and overall village vitality. (Soto et al., 2017, Siang et al., 2020, Zhaninson, 2009) Against this backdrop, villages are moving away from purely traditional development models toward spaces that are livable and capable of meeting growing tourism demand. This study takes a step into this space by analyzing key indicators to demonstrate how sustainable design can elevate resident satisfaction and improve the economic performance of rural communities. The investigation considers lifestyle changes, resource management, and the integration of low-energy technologies alongside the preservation of local architectural fabric and cultural values of the village, aiming to form an efficient and transferable model. (Zakariya et al., 2019, Williams & Brooks, 2021, Vardapetova, 2018) Attention to open spaces, natural lighting and ventilation, spatial organization, and visual coherence of the village landscape are identified as pivotal factors shaping a sustainable living experience. Moreover, by examining successful global examples and adapting them to local capacities, we can gain insight into implementation barriers and opportunities and propose strategies that align with the identity of village. (Truong et al., 2018, Timothy & Boyd, 2019, Tegmark, 2019) Equally important is the emphasis on social participation and meaningful involvement of local stakeholders in the design and implementation processes, ensuring that built projects not only serve housing and recreation functions but also contribute to social capital and rural identity, thereby sustaining long-term viability.

Ultimately, the aim of this research is to develop a systematic framework for evaluating eco-architecture experiences in villages, enabling comparative assessment and providing clear answers to questions about how sustain-

able design relates to residential and tourism functions. The scope of this study is focused on Yaseh-Cahy as a case study to illustrate how the proposed framework can illuminate the relationship between sustainable architecture and the performance of housing and tourism components in an Iranian rural context.

MATERIALS AND METHODS

The pleasant indicators of eco-architecture approche

The pleasant indicators of eco-architecture approach begin with a clear emphasis on human and comfortable spaces, where the design process centers on the lived experiences of residents and visitors alike. This criterion advocates for indoor environments that prioritize thermal comfort, air quality, acoustics, and visual well-being, ensuring that occupants feel at ease across different times of day and seasons. It also invites attention to accessibility, adaptability, and inclusive design, so that spaces can accommodate diverse activities and a range of user needs without sacrificing aesthetic quality or environmental performance.

By foregrounding comfort as a measurable objective, the approach translates abstract sustainability goals into tangible improvements in daily life, contributing to longer dwell times, higher satisfaction, and a more inviting atmosphere for social interaction and recreation within residential and tourism contexts. (Singh & Patel, 2020, Shafqat & Ahmed, 2022) At the heart of eco-architecture is the orientation toward harmony with natural and cultural environment, recognizing that sustainable buildings do not exist in isolation from their landscapes, climates, and cultural histories. This principle calls for passive design strategies that work with local sun paths, wind patterns, and microclimates to minimize energy use while maximizing thermal and daylight comfort. It also encompasses material choices that reflect local traditions and craftsmanship, supporting a sense of place and continuity with the past. By aligning built form with ecological rhythms and cultural narratives, projects can strengthen community identity and foster responsible behavior among users who value authenticity alongside efficiency. This tripartite framework further integrates a continuous and cohesive Design approach, which seeks to establish logical, interconnected relationships among site, program, and structure. A continuous design promotes seamless transitions between indoor and outdoor spaces, enhances pedestrian circulation, and ensures that landscapes, courtyards, and building envelopes reinforce a coherent experience. It also emphasizes modularity and adaptability, allowing components to evolve with changing needs and technologies without compromising the overall aesthetic or environmental performance. The result is a holistic system where each element reinforces others, reducing fragmentation and creating a membrane of sustainability that feels inevitable rather than forced. (Rogerson et al., 2021, Miller & Davis, 2018, Martinez & López, 2020) In practice, the Human and Comfortable Spaces criterion translates into measurable indicators such as indoor environmental quality (IEQ) metrics, daylight autonomy, and user-centered comfort surveys. (Hu et al., 2019, Kumar et al., 2023, Johnson & Lee, 2019)Designers must consider occupiable heights, window-to-wall ratios, shading devices, and cross-ventilation strategies that respond to local climate realities. The goal is not merely to reduce energy consumption but to cultivate spaces that people instinctively choose for their coziness, clarity, and restorative potential. When comfort becomes a design driver, occupancy patterns align with efficient performance, and the built environment supports healthier, more vibrant communities around residential and tourism complexes. (Lindner & Wiefels, 2021) Harmony with natural and Cultural Environment requires a careful balance between ecological sensitivity and cultural relevance. Practically, this means selecting materials with low embodied energy

sourced locally where possible, employing construction techniques that minimize waste, and incorporating landscape design that protects biodiversity while providing shade, cooling, and aesthetic value. Cultural respect is reflected in the preservation of traditional silhouettes, vernacular textures, and artisanal techniques that strengthen local identity. The resulting environments feel authentic, resilient, and better integrated with the surrounding ecological and social fabric, reducing the need for costly, centralized interventions. Continuous and cohesive design is reinforced through strategic planning that embeds coherence at every scale, from site layout to interior detailing. (Hu, 2019, Benenti et al., 2020)This involves establishing clear design hierarchies, consistent material palettes, and unified color schemes that knit together disparate functions such as housing, services, and tourist amenities. It also implies computational or iterative design processes that test performance against real-world use, enabling refinements before construction. A cohesive design reduces maintenance complexity, improves energy performance, and creates a sense of reliability and predictability for occupants and operators. Together, these three pillars create a comprehensive foundation for evaluating the pleasant indicators of eco-architecture in rural and semi-rural settings like Yaseh-Chay. By centering human comfort, aligning with local natural and cultural contexts, and maintaining a continuous, integrated design philosophy, projects can achieve a synergy that enhances life quality, preserves heritage, and fosters sustainable tourism. The resulting environments not only meet practical needs but also cultivate pride and belonging among residents, visitors, and stakeholders who recognize the value of thoughtfully designed, ecologically responsible spaces.

Methodology

The type of the present research is descriptive-analytical and is applied in purpose, at the same time, it has a developmental nature due to the study of the course of the foundations and concepts. The paradigm of the present research is interpretive and has a qualitative research design. The method of collecting information is documentary and field, and the survey method was used to collect data. First, in the first step, after examining the general concepts related to the subject, the three indicators resulting from the Riahi Zaniani et al., 2024, are briefly examined and further examined in order to evaluate the three indicators. The aim of the present research is to explain the pleasant indicators in eco-architecture with an emphasis on tourist complexes in the village of Yaseh-Chay. The statistical population consists of 200 residents and a researcher-made questionnaire is used randomly. In the final step, the evaluation results for all three components will be analyzed and interpreted. Therefore, the research framework can be presented based on the table below. (Tab. 1)

Tabel 1:Indicator in explaining the pleasant components in eco- architecture up to the tourism complexes (Riahi Zaniani et al., 2024)

Indicator	Cognitive Component	Type of Factor	Qualitative or Quantitative	Description	Method of Assessment
Human and Comfortable Spaces	Feelings of comfort and relaxation in architectural space	Effectiveness	Effectiveness	The degree of user comfort and satisfaction in spaces	Questionnaires

Harmony with Natural and Cultural Environment	Alignment with natural and cultural surroundings	Background	Qualitative	Compatibility of architecture with local environment and culture	Questionnaires
Continuous and Cohesive Design	Consistency in architectural elements	Structural	Qualitative	Coherence and harmony of design elements	Questionnaires

DISCUSSION AND FINDINGS

Case Study: Yaseh-Cahy Village

Yaseh-Chay village is located in Chaharmahal and Bakhtiari Province, Saman County, Zayandeh Roud District and Hoore Rural District. It is located 54 km from Shahrekord and 80 km from Isfahan. This village is unique for the development of rural tourism due to its geometric shape and the presence of historical houses and corridors. There are historical houses with special architecture in this village and the houses in this village are connected through corridors, in a way that the doors of the houses in this village open inside the corridors. Due to the scarcity of land for building houses, the village has made the most of the land, and this has led to the fact that there are no alleys in the village, but rather, traffic is carried out through corridors. The village tunnels are still standing after more than a century. The main route of this corridor, 400 meters long, connects the north and south of the village, and 5 secondary corridors are the communication routes of the old houses. (Fig. 1)

Figure 1: Geographical location of Yaseh-Chay village and images of the village's texture and architecture

Indicators Evaluation

Human and Comfortable Spaces

The evaluation of human and comfortable Spaces within the Yaseh Chay village context centers on how residents and visitors experience the built environment on a daily basis. Survey responses illuminate the degree to which indoor environments support thermal comfort, air quality, acoustics, and visual well-being, which collectively shape perceived livability and satisfaction. Respondents frequently point to seasonal variability, noting that effective passive cooling and heating systems, combined with appropriate shading and insulation, are essential for maintaining consistent comfort levels across different times of day and year. This pattern suggests that comfort is not a peripheral attribute but a core driver of daily routines, social interactions, and the willingness of guests to linger in residential and tourism spaces. Accessibility and inclusivity emerge as integral components of perceived comfort.

The questionnaire responses indicate that spaces are valued when they accommodate diverse users, including children, elderly residents, people with mobility challenges, and families traveling with luggage or strollers. Participants emphasize the importance of step-free access, continuous paths, lifts or ramps where necessary, and restroom facilities that are usable by people with varying needs. The data reveal that inclusive design not only broadens the usability

of spaces but also signals social equity within the village, reinforcing a sense of welcome that extends to both long-term inhabitants and transient visitors. Adaptability and functional versatility surface as strong indicators of comfort in the responses. Residents appreciate interiors and outdoor interfaces that can flexibly accommodate multiple activities, from quiet reading to informal gatherings, outdoor markets, and small-scale events. Questionnaire results show a preference for modular furniture, adjustable lighting, and flexible spatial layouts that can respond to changing occupancy and seasonal tourism demands. This adaptability is correlated with higher reported satisfaction because it reduces friction between different uses and reduces the need for costly renovations or frequent reconfigurations. Visual environment and aesthetics contribute to the overall sense of ease and well-being, as captured by respondent comments about light, color schemes, materials, and view quality. The data point to a strong association between daylight availability, glare control, and the psychological sense of openness. Participants often describe spaces with ample daylight, well-placed windows, and natural materials as more welcoming and restorative. Aesthetics are not merely about beauty; they are linked to perceived healthfulness and comfort, suggesting that visual quality acts as a facilitator for positive mood states and social interactions in both homes and tourism-oriented facilities.

Finally, satisfaction with maintenance, cleanliness, and perceived safety of spaces closely aligns with comfort indicators. Respondents emphasize that well-maintained surfaces, reliable shade devices, clean indoor air, and low noise levels contribute to a sense of security and ease. Cleanliness and regular upkeep are seen as tangible signals of care and investment in the community, reinforcing trust in the built environment. The perception of safety-encompassing lighting at night, clear sightlines, and visible maintenance-reduces stress and supports longer stays by both residents and visitors, thereby reinforcing the role of comfort as a foundational element of sustainable village life. Accordingly, the results of the questionnaire for the mentioned indicators are as follows: (Tab. 2 and Chart 1)

Table 2: Indicator evaluation results of human and comfortable spaces

Human and Comfortable Spaces Indicator Questions	Number of comments given based on frequency					Total score of each question * Importance level	Final average score
	Too much (5)	Many (4)	Medium (3)	Low (2)	Very little (1)		
4	67	58	40	22	13	740	69
5	58	49	40	40	13	70	
6	58	40	31	40	31	660	

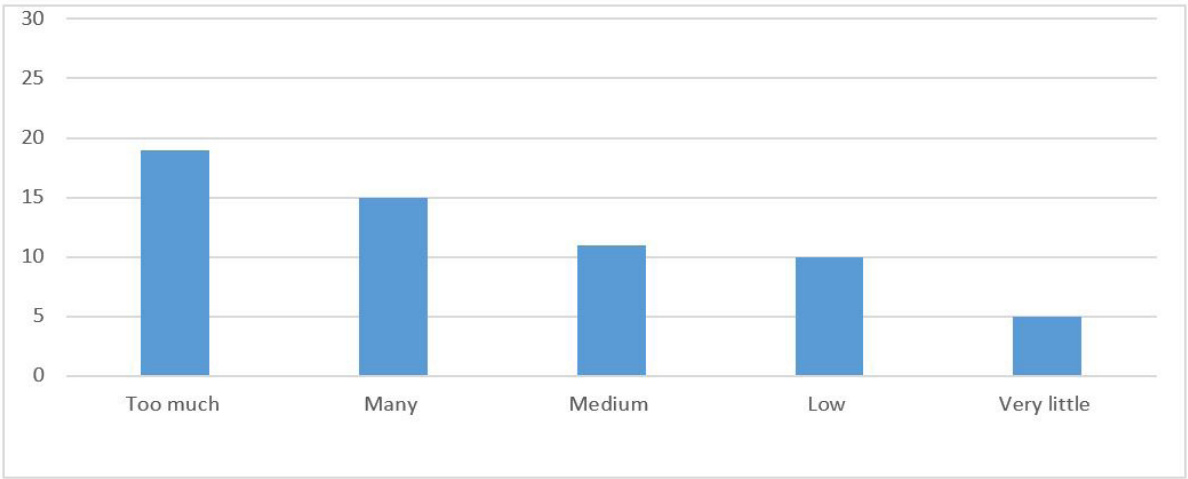

Figure 2: Frequency chart of participants' responses to human and comfortable spaces Indicator questions

Harmony with Natural and Cultural Environment

The evaluation of Harmony with Natural and Cultural Environment in Yaseh Chay village centers on how survey respondents perceive the alignment of built form with the surrounding ecology, climate, and cultural heritage. Participants describe the degree to which materials, textures, and scales reflect local traditions and landscape characteristics, suggesting that authentic integration enhances trust and acceptance of eco-architectural interventions. Responses often highlight the importance of using locally sourced materials and familiar architectural vocabularies that resonate with residents' sense of place, thereby reinforcing cultural continuity while supporting environmental performance. Climate-responsive strategies emerge as a salient facet of harmony. Respondents report favorable views toward designs that respond passively to sun, wind, and shade, reducing reliance on mechanical systems and creating more comfortable outdoor and indoor experiences. They note that features such as appropriate orientation, shading devices, natural ventilation, and vernacular courtyards contribute to energy efficiency and climate resilience. This pattern indicates that villagers value solutions that honor environmental context rather than imposing generic modernist forms that may feel incongruent with the terrain and microclimates. Biodiversity and landscape integration receive considerable attention in the feedback. Survey data reveal appreciation for landscape design that preserves native flora and supports pollinators, water management, and soil health. Respondents associate harmonious design with low-impact interventions that maintain ecological balance, such as permeable paving, green roofs, and integrated water features that double as aesthetic and functional elements. The emphasis on ecological harmony underscores a broader aspiration: to create spaces that function within and bolster the local ecosystem rather than disrupt it.

Cultural heritage and authenticity are repeatedly highlighted as foundations of harmony. Respondents value architectural expressions that reflect traditional craft, patterns, and materials intrinsic to the region. They argue that

such reflections of cultural memory strengthen community pride and guide visitor expectations toward respectful engagement with local customs. The data suggest that when new developments echo vernacular aesthetics and craftsmanship, the perceived legitimacy and acceptance of eco-architectural interventions increase, facilitating smoother implementation and longer-term stewardship. finally, social and symbolic resonance with the landscape features strongly in the responses. People point to the visual coherence between built forms and topography, watercourses, and agricultural patterns as a meaningful indicator of harmony.

The survey indicates that when buildings frame vistas, align with sightlines of sacred or historically significant sites, or echo the rhythm of fields and orchards, inhabitants experience a deeper connection to place. This symbolic resonance complements functional performance, reinforcing a holistic sense of belonging and responsibility toward preserving the natural and cultural fabric of Yaseh-Chay. Accordingly, the results of the questionnaire for the mentioned indicators are as follows: (Tab. 3 and Chart 2)

Table 3: Indicator evaluation results of Harmony with nature and cultural environment

Harmony with nature and cultural environment	Number of comments given based on frequency					Total score of each question * Importance level	Final average score
	Too much (5)	Many (4)	Medium (3)	Low (2)	Very little (1)		
4	31	40	40	40	13	710	68
5	22	40	58	40	13	680	
6	22	49	58	31	22	670	

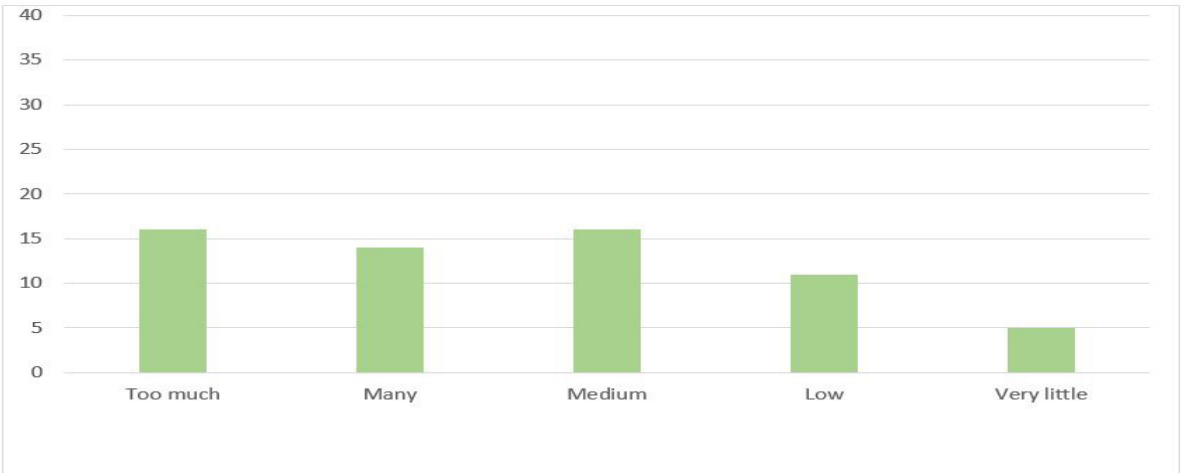

Figure 3: Frequency chart of participants' responses to Harmony with nature and cultural environment Indicator question

Continuous and Cohesive Design

The evaluation of continuous and cohesive design in Yaseh-Chay village, as captured through the questionnaire, focuses on the integrity and coherence of the built environment across scales from site to interior. Respondents emphasize that a seamless architectural narrative is observable when spaces, pathways, and landscapes share a unified logic in form, materiality, and function. This perceived continuity supports ease of wayfinding, reduces cognitive load for users, and enhances the overall sense that the village is a thoughtfully planned ecosystem rather than a collection of disparate interventions. Survey results highlight the importance of a consistent design language. Participants value uniform material palettes, recurring typologies, and common detailing that knit disparate components-housing, service facilities, and tourist amenities-into a recognizable, legible environment. When inconsistencies appear, respondents note reduced perceived quality and a sense of fragmentation, which can undermine confidence in eco-architectural intentions and dampen visitor experience. The data thus point to coherence as a tangible driver of trust, maintenance efficiency, and long-term identity. Pedestrian networks and interface with outdoor spaces receive particular attention regarding continuity. Respondents comment on the need for continuous, accessible routes that smoothly connect homes, markets, and public plazas, with landscape features and shelter en route that reinforce a walkable, inviting atmosphere. The presence of consistent shade strategies, lighting levels, and seating arrangements along streets and courtyards is associated with a feeling of safety, comfort, and predictability, encouraging longer stays and more fluid movement between residents' daily activities and tourism encounters.

The integration of new interventions with the local context is a recurring theme in the responses. Participants prefer modular, adaptable designs that can be added or reconfigured without breaking the village's visual and spatial coherence. Co-design and iterative testing emerge as recommended practices to preserve continuity while accommodating evolving needs, such as seasonal tourism spikes or community programs. The implications for maintenance and governance are clear: cohesive design reduces retrofit costs and supports a stable governance framework. Finally, the psychological and experiential dimensions of continuity are evident in respondent narratives. People describe spaces that feel "legible" and "in tune with the land," where sightlines, scale, and rhythms reflect a unified understanding of place. This holistic coherence is linked to stronger attachment to Yaseh-Chay, higher satisfaction with both housing and tourism facilities, and a greater willingness to engage in preservation and stewardship activities. In sum, Continuous and Cohesive Design emerges not merely as an aesthetic preference but as a practical, social, and economic asset that underpins sustainable village life. (Tab. 4 and Chart 3)

Table 4: Indicator evaluation results of continuous and cohesive design

Continuous and cohesive design	Number of comments given based on frequency					Total score of each question * Importance level	Final average score
	Too much (5)	Many (4)	Medium (3)	Low (2)	Very little (1)		
4	31	58	40	13	58	740	70
5	40	58	49	22	31	700	
6	31	58	49	40	22	670	

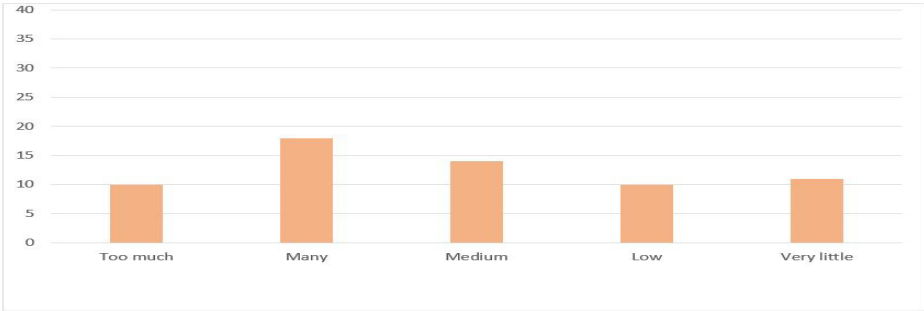

Figure 4: Frequency chart of participants' responses to continuous and cohesive design Indicator questions

RESULTS AND CONCLUSION

The three indicators collectively evaluate how well the village's built environment supports human comfort, ecological and cultural harmony, and cohesive design across spaces, with responses organized by frequency categories (Too much, Many, Medium, Low, Very little) and weighted totals that yield final average scores around the high-60s to low-70s, suggesting an overall positive appraisal with meaningful within-criterion variability. In Human and Comfortable Spaces, the first row shows 67 responses in "Too much" and 58 in "Many," followed by 40 in "Medium," 22 in "Low," and 13 in "Very little," culminating in a final average score of 69. This pattern indicates that respondents frequently perceive aspects of the space as highly engaging or strongly utilized, which can reflect vibrant communal activity, dense occupancy, or design features that push the envelope on comfort or stimulation. However, the prominence of "Too much" alongside "Many" also raises questions about potential over-occupation, acoustic or thermal competition, or visual saturation in certain blocks. When viewed alongside the second and third rows, this suggests spatial heterogeneity: some zones may feel richly used and demand careful management of comfort thresholds, while others meet more moderate expectations of space, light, and acoustics.

Turning to Harmony with nature and cultural environment, Table 2's three rows display a shift in distribution that emphasizes mid-to-high engagement levels (Many and Medium) with notable counts in Very little and Too much across rows. The first row records 31 in "Too much," 40 in "Many," 40 in "Medium," 40 in "Low," and 13 in "Very little," yielding a total of 710 and an average around 68. This pattern points to a nuanced perception: many features are perceived as reasonably harmonious with ecological and cultural contexts, yet there are pockets where

either overstatement (Too much) or insufficient resonance (Very little) occurs. The persistence of mid-range responses suggests a balance where interventions are often aligned with nature and local culture but not uniformly so, indicating areas where design guidelines or community-specific adaptations could tighten alignment with ecological sensitivity and cultural authenticity.

The second row of Table 2, with a total score of 680, shows a shift toward middle categories (Medium and Many) and fewer extreme responses, implying a broader segment of respondents see an acceptable or aspirational level of harmony without perceiving excess. This could reflect improvements in landscape integration, material choices, or culturally resonant motifs that avoid heavy-handed ecological statements. The third row, scoring 670, reveals more pronounced concern in the tail end of the distribution: increases in "Low" and "Very little" responses may signal perceived gaps in authentic cultural expression or ecological integration, especially in newer developments or tourist-oriented facilities. Taken together, Table 2 suggests that while many components achieve harmonious alignment, there are localized discrepancies requiring targeted participatory design reviews and contextual storytelling to strengthen resonance with local traditions and ecosystems.

Table 3, Continuous and Cohesive Design, presents a pattern consistent with the other indicators: a central tendency toward mid-to-high engagement with a mix of responses that reflects both connectivity and potential fragmentation. The first row shows a balance among "Too much," "Many," and "Medium," with relatively lower counts in "Low" and "Very little," culminating in a final average around 70. This indicates that, overall, the village exhibits strong coherence and flow in axis interconnectivity and functional sequencing, yet some respondents perceive segments where the design does not cascade seamlessly-perhaps where wayfinding, transitions between spaces, or typological variety disrupts perceived cohesion. The second row's distribution—featuring substantial counts in "Medium," "Many," and "Too much"-suggests a more mixed judgment, where certain projects are celebrated for coherence while others feel slightly over-engineered or inconsistent with surrounding fabric. The third row, with notable "Medium" and "Low" responses, hints at zones where the intended continuous and cohesive design logic fails to fully materialize, possibly due to evolving land-use patterns, programmatic shifts, or misalignment between new forms and historic street networks.

Cross-criterion interpretation reveals converging themes: respondents perceive a generally positive trajectory toward human-centered comfort, ecological-cultural harmony, and design cohesion, yet confirm notable spatial heterogeneity. The high counts in the top two categories for some rows imply areas of strong engagement and well-executed design cues, while the presence of mid-to-low responses in others points to places where comfort thresholds, ecological alignment, or design continuity fail to meet aspirational standards. This pattern underscores the importance of targeting interventions, not as uniform upgrades but as context-specific refinements that respect local climate, craft traditions, and pedestrian-scale experience. From a methodological perspective, the three tables share a common framework: each row represents a segment of the built environment or a design dimension, with frequency distributions that reflect respondent perceptions, a total score that aggregates these perceptions with weighting, and a final average that provides a high-level comparator across indicators. Interpreting the totals requires clarity on the number of questions per row and the exact weighting scheme. If each row corresponds to a single question, the variation across categories reveals how different spatial features perform in comfort, harmony, and cohesion. If rows aggregate multiple questions, the variation may reflect grouping choices rather than

intrinsic performance differences, necessitating a decomposition for precise diagnostic insights.

In terms of policy and practice implications, the results advocate for a staged, evidence-based improvement plan. For human and comfortable spaces, a focus on acoustic planning, shading, and microclimate management in zones with high "Too much" responses could reduce perceived over-stimulation while preserving vibrant user engagement. In harmony with nature and cultural environment, enhancing community-led design review processes and elevating local materials and storytelling can address the observed gaps in alignment, especially in rows with elevated "Low" and "Very little" responses. For Continuous and Cohesive Design, prioritizing clear circulation logic, legibility of routes, and consistent architectural language across blocks would strengthen perceived cohesion, particularly in areas where transitions feel abrupt or where newer interventions diverge from traditional urban fabric. Taken together, the three indicators suggest that the village is moving toward a more humane and environmentally attuned settlement that also values coherent spatial sequencing. The quantitative scores-clustering around the high-sixties to low-seventies in the final averages- confirm a generally favorable reception, while the within-indicator dispersion highlights actionable opportunities for targeted design guidance, community participation, and context-sensitive material selections. Such an integrated interpretation aligns with contemporary urban design research that emphasizes place-based strategies, adaptive comfort, and culturally informed ecologies, reinforcing the case for iterative, data-driven design governance that centers resident experience and environmental compatibility.

REFERENCES

Benenti, M., Paolucci, E., & Cinti, M. (2020). Exploring the concept of "delights" in destination marketing. Journal of Tourism Management, 76, 103-115.

Hu, L. (2019). Employment effects in the tourism industry. Tourism Economics, 25(3), 346-361.

Hu, Y., Liu, C., & Guo, Y. (2019). Infrastructure development and sustainable tourism growth. Journal of Infrastructure Development, 11(2), 95-110.

Johnson, M., & Lee, S. (2019). Flexibility in landscape planning. Landscape Architecture Journal, 24(4), 112-125.

Kumar, V., Patel, R., & Sharma, A. (2023). Creating engaging tourism environments through aesthetics and accessibility. Journal of Tourism and Hospitality Management, 11(1), 15-30.

Lee, H., Park, S., & Kim, J. (2021). Building strategies to attract international tourists. Tourism Management, 80, 104161.

Lindner, R., & Wiefels, J. (2021). Infrastructural development and tourism growth: An analysis of sustainable investments. Tourism Management Perspectives, 37, 100817. .

Martinez, L., & López, J. (2020). Sensory engagement in restorative landscapes. Psychology of Environment, 12(3), 202-214.

Miller, S., & Davis, R. (2018). Supporting biodiversity through landscape architecture. Ecological Design Review, 21(2), 77-89.

Ramirez, A., & Lopez, C. (2019). Climate responsiveness in landscape planning. Climate

Riahi Zaniani,M. , Mahdavipour Babaki,H. and Ebrahimnejad,M. (2024). Explaining the pleasant components in eco-architecture and its impact on residential and tourism complexes. International Journal of Urban Management and Energy Sustainability, 5(1), 268-286. doi: 10.22034/ijumes.2025.2008291.1154

Rogerson, C. M., Li, X., & Sun, Q. (2021). Experiential tourism and delightfulness: A literature review. Tourism Geographies, 23(2), 399-418.

Shafqat, S., & Ahmed, M. (2022). Cultural heritage and tourism experience: Designing spaces for identity. International Journal of Cultural Heritage Management, 29(3), 300-317.

Siang, J. H., Yang,W. G., & Liu, L.W. (2020). Impact of WOM and online WOM on tourist destina-

tions in Indonesia. Utopia y Praxis Latinoamericana, 25(10), 297–304.

Singh, P., & Patel, N. (2020). Cultural integration in green spaces. Urban Cultural Landscapes, 6(3), 92-105.

Soto, M. T. R., & Clave, S. A. (2017). Second homes and urban landscape patterns in Mediterranean coastal tourism destinations. Land Use Policy, 68, 117–132.

Stefănică, M., Sandu, C. B., Butnaru, G. I., & Haller, A. P. (2021). The nexus between tourism activities and environmental degradation: Romanian tourists' opinions. Sustainability, 13(16), 9210. https://doi.org/10.3390/su13169210

Stylidis, D. (2017). Place attachment, perception of place and residents' support for tourism development. Tourism Planning & Development, 15(2), 188–210.

Suhartanto, D., Brien, A., Primiana, I., Wibisono, N., & Triyuni, N. N. (2020). Tourist loyalty in creative tourism: The role of experience quality, value, satisfaction, and motivation. Current Issues in Tourism, 23(7), 867–879. https://doi.org/10.1080/13683500.2019.1568400

Suharyono, S., & Digdowiseiso, K. (2021). The effects of environmental quality on Indonesia's inbound tourism. International Journal of Energy Economics and Policy, 11(1), 9–14.

Tegmark, M. (2019). Designing eco-friendly buildings with local materials: Strategies for sustainable tourism development. Journal of Sustainable Architecture, 7(2), 45-60.

Timothy, D., & Boyd, S. (2019). Cultural heritage and tourism: An introduction. In Cultural Heritage and Tourism Development. Channel View Publications.

Touloun, C., & Eddali, R. (2023). Tourist environmental behaviour: A narrative review. Environment-Behaviour Proceedings Journal, 8(23), 247–252. https://doi.org/10.21834/ebpj.v8i23.4510

Truong, T. T., Nguyen, T. H., & Le, T. T. (2018). Assessing tourism potential and weaknesses in Iran. Tourism Review International, 22(4), 321–340.

Van De Schoot, R., Schmidt, P., De Beuckelaer, A., Lek, K., & Zondervan-Zwijnenburg, M. (2015). Measurement invariance. Frontiers in Psychology, 6, 1064. https://doi.org/10.3389/fpsyg.2015.01064

Vardapetova, T. (2018). Tourism as a global industry: Trends and challenges. International Journal of Hospitality and Tourism, 12(2), 89-102..

Williams, D., & Brooks, L. (2021). Multi-use outdoor environments and community engagement. Community Design Review, 5(2), 43-56.

Zakariya, J., Iqbal, M., & Ahmad, R. (2019). From postcards to films: Exploring the memory of destinations. Tourism Geographies, 21(3), 452–471.

Zhang, Y., Khan, S. A. R., Kumar, A., Golpira, H., & Sharif, A. (2019). Is tourism really affected by logistical operations and environmental degradation? An empirical study from the perspective of Thailand. Journal of Cleaner Production, 227, 158–166. https://doi.org/10.1016/j.jclepro.2019.04.164

Zhaninson, T. (2009). Exploring "delightfulness" as a marketing concept. International Journal of Hospitality Management, 28(4), 431-440.

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