



Erosive Governance in Fragile Rural Tourism: Spatial Rent, Selective Law, Digital Overexposure

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ABSTRACT

Rural tourism is widely promoted as a pathway to development, yet in ecologically fragile, peri-metropolitan settings it often produces the opposite. Existing scholarship examines the symptoms separately—overtourism, rural gentrification and digital tourism—leaving the political economy and governance mechanisms that connect them under-theorised. Drawing on a grounded theory study of mountain villages in Iran's Alborz region, this article asks why tourism became a vector of unsustainability. Following a constructivist grounded theory approach, the analysis draws on in-depth interviews with 72 residents, local officials and civil-society actors, coded through initial, focused and theoretical stages. It identifies three interrelated mechanisms: the institutional imposition of tourism space before places are prepared; the conversion of this fragmented context into spatial rent through selective, negotiable enforcement of law; and digitally accelerated overexposure that triggers ecological, infrastructural and managerial breakdown. Theorised as erosive governance in fragile geographies, this recursive process actively exhausts the capacities sustainability requires—showing that fragile destinations depend less on visitor numbers than on being governed before they are exposed.

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Introduction

Rural tourism is routinely promoted as a pathway to economic diversification, employment and revitalisation, particularly for peripheral communities whose agrarian livelihoods have become precarious (Gao & Wu, 2017; Keyim, 2018). Yet in ecologically fragile and peri-metropolitan settings, the encounter between rural places and metropolitan tourist demand frequently produces the opposite of the development it promises. The mountain villages of Iran's Alborz region, within weekend reach of the Tehran–Karaj conurbation, exemplify this reversal: in little more than a decade, villages whose appeal rests on rivers, orchards and a fragile mountain ecology have been reconstituted as weekend destinations, with consequences residents describe in terms of water conflict, blocked emergency access, riverine waste, congestion and the conversion of agricultural land into speculative villa development. Tourism did arrive and value was generated; what materialised alongside it was a distribution of costs and benefits so uneven, and a degradation of place so rapid, that tourism became a driver of unsustainability rather than a remedy for rural decline. These villages are analytically significant rather than merely illustrative, because they combine within a single destination-making process conditions that the relevant literatures have examined only separately: ecological fragility, agrarian land-use, peri-metropolitan accessibility, fragmented institutional authority and platform-mediated visibility. This pattern—visible across fragile rural geographies well beyond Iran—raises a question that conventional accounts of tourism impact answer only partially: why does tourism, under certain conditions, exhaust the very places and communities it is expected to sustain?

Existing scholarship offers powerful but fragmented resources for addressing this question. The overtourism literature documents the experiential and ecological strain of excessive visitation (Koens et al., 2018), yet it largely reactivates long-standing carrying-capacity debates (Butler, 2020; McCool & Lime, 2001; Wall, 2020) while leaving the political economy and governance of capacity under-examined. The rural tourism gentrification literature, drawing on rent gap theory, illuminates how rural land is commodified and how the state acts as a gentrifying agent (Ristiawan et al., 2024; Smith, 1979), but remains centred on land and displacement. The digital tourism literature shows how social-media platforms render obscure places hyper-visible and reshape mobility (Siegel et al., 2023), yet treats platforms mainly as amplifiers of demand. Each literature thus captures a symptom—ecological strain, land capture, digital visibility—while the governance mechanisms that bind these symptoms into a coherent trajectory of decline remain under-theorised. The research question guiding the analysis is therefore: through what processes did tourism become a vector of unsustainability rather than development in the fragile mountain villages of Alborz, and how are these processes related?

To address this question, the study adopts a constructivist grounded theory approach, building an explanatory account inductively from the situated knowledge of those who produce and inhabit these destinations. Drawing on 72 in-depth interviews spanning private and livelihood actors, local and governmental institutions, and civil-society and informal-governance actors, analysed through initial, focused and theoretical coding, the analysis identifies three interrelated mechanisms—the institutional imposition of

tourism space before places are materially or participatorily prepared; the conversion of this fragmented context into spatial rent through the selective and negotiable enforcement of law; and the digitally accelerated overexposure of fragile places—and theorises them as a recursive process termed erosive governance in fragile geographies. The contribution is threefold. Conceptually, the study integrates three literatures that ordinarily proceed in isolation—overtourism and carrying capacity, rural tourism gentrification, and digital tourism—specifying how land, mobility and digital visibility are linked through governance, thereby advancing a political-economy account of why sustainable tourism governance fails in fragile rural destinations. Theoretically, it advances a processual model in which governance does not merely fail to manage tourism but actively exhausts the institutional, social and ecological capacities on which sustainability depends, repoliticising carrying capacity as a governance achievement rather than a property of place. Empirically, it extends rent gap reasoning into a peri-metropolitan rural setting of the Global South and foregrounds selective enforcement and local agency in reproducing unsustainability, in keeping with calls to treat tourism injustice as governance-informed and collective. The article proceeds through the conceptual framework (Section 2), methodology (Section 3), findings (Section 4), discussion (Section 5) and conclusion (Section 6).

Theoretical Foundations

This study draws these strands together through a political economy of tourism lens, which treats destinations not as neutral markets but as contested spaces where access to land, mobility and visibility is governed in ways that distribute value and harm unequally (Bianchi, 2018; Britton, 1991). The first conceptual pillar derives from rent gap theory. Smith (1979) reframed the transformation of devalorised areas as a production-side process: capital flows to locations where a gap has opened between the ground rent capitalised under current use and the rent obtainable under a "higher and better" use. Subsequent scholarship insists the theory is fundamentally about the state's role in opening, stigmatising and closing such gaps (Slater, 2017), allowing the concept to travel to platform-mediated short-term rental markets (Wachsmuth & Weisler, 2018) and to "rent gap governance," in which profit-seeking reinvestment and state intervention become mutually constitutive (Risager, 2022). What remains under-theorised is the rural, peri-metropolitan fragile geography of the Global South, where rent gaps are produced through the administrative designation of villages as tourism space, the relaxation of land-conversion controls and the brokering of private interests by fragmented authorities (Kan, 2021; Ristiawan et al., 2024). Herein lies the concept's analytical purchase for this study: it explains how proximity to metropolitan demand, combined with selective and negotiable enforcement, converts orchards, riverbanks and inherited smallholdings into speculative assets, while displacing the social and ecological costs onto those least able to internalise the appreciated value of place.

The second pillar concerns tourism carrying capacity and its sustained critique. Early formulations sought a threshold number of visitors beyond which degradation would occur (O'Reilly, 1986)—a framing decisively problematised by McCool and Lime (2001), who showed that defensible numerical capacities are almost never establishable

and redirected the question toward acceptable social and ecological conditions (McCool, 1994; Stankey et al., 1985). Yet the managerial turn has itself been criticised for licensing creeping, incremental development (Butler, 1996), and the field's neglect of capacity left it conceptually unprepared for the resurgence of these concerns under the banner of overtourism (Butler, 2020; Wall, 2020). The decisive limitation of this tradition is its tendency to treat capacity as a technical threshold detached from the political economy and governance arrangements that determine whether any threshold is ever defined, monitored or enforced; capacity breakdown is thereby naturalised as visitor pressure rather than explained as institutional design. The present study repoliticises the concept by treating capacity not as a fixed property of place but as a governance achievement that fragile, weakly coordinated institutions systematically fail to produce—an emphasis convergent with recent conceptualisations of overtourism that extend carrying capacity to socio-political dimensions (Mihalič, 2020).

The third pillar addresses the digital and mediatised dimension of tourism mobility. Social-media platforms do not merely market destinations but co-produce them as consumable visual artefacts: previously obscure places are rendered hyper-visible through geotagged imagery, influencer circulation and algorithmic amplification, frequently generating visitor flows that overwhelm the represented site (Siegel et al., 2023). Such representation is far from neutral, reproducing aestheticised iconographies of landscape-as-possession (Smith, 2021); platforms like Instagram reshape how visitors move through and care for place (Molin et al., 2025); and the visibility they confer is geographically selective, elevating some sites into hot spots while feeding on socio-spatial inequalities (Boy & Uitermark, 2017). Research on "wanghong" (internet-famous) destinations extends this to the institutional register, showing how algorithm–user–capital circuits convert online attention into material spatial transformation and compel local authorities into reactive "governance improvisation" (Cao, 2024; Ma & Wu, 2026; Yang et al., 2025). Yet much of this literature treats platforms as amplifiers of demand rather than as actors entangled with the institutional failure to govern the spaces they make visible. Read together, the three pillars expose an integrative gap: rent gap theory illuminates the political economy of land but says little about ecological thresholds or digital visibility; the carrying-capacity and overtourism literatures specify managerial limits but rarely connect them to differentiated rights over rural space; and the digital-tourism literature explains visibility while bracketing rent extraction and governance capacity. No existing framework explains how these processes are causally sequenced in fragile rural geographies—how the institutional production of unprepared destinations enables selective rent extraction, which leaves places defenceless against digitally accelerated flows, culminating in a breakdown that is simultaneously ecological, infrastructural and institutional. It is this sequencing that the study conceptualises as erosive governance in fragile geographies. Consistent with the grounded theory design, these literatures served as sensitising resources rather than coding templates: categories were generated inductively and only subsequently brought into dialogue with these debates.

Methodology

Research design and methodological orientation

This study adopted a constructivist grounded theory design (Charmaz, 2014) to explain why rural tourism in the Alborz mountain villages shifted from a potential development pathway into a mechanism of spatial injustice, ecological degradation and institutional delegitimation. Grounded theory was appropriate because the objective was not to test a predefined causal model but to generate a processual explanation from the situated accounts of private and livelihood actors, local and governmental institutions, and civil-society and informal-governance actors. Data were treated as co-produced through interaction between participants, field context and researcher interpretation, and initial, focused and theoretical coding—combined with constant comparison across participant groups, villages and issue domains—provided a systematic route from empirical incidents to categories, relationships and a core category. Because the study seeks to trace processes rather than catalogue impacts, the resulting theory is proposed as a substantive, contextually bounded explanation of erosive governance in fragile geographies rather than as a universal model of rural tourism unsustainability.

Study area and case rationale

The empirical setting comprised five mountain villages in Iran's Alborz region, a peri-metropolitan rural landscape combining ecological fragility, agricultural livelihoods, narrow mountain roads, limited water resources and proximity to metropolitan demand from Tehran and Karaj. These villages have increasingly been positioned as weekend and nature-based destinations, yet their material and institutional capacity to absorb visitor flows remains uneven and contested. The case is analytically significant rather than statistically representative: it offers a grounded setting for examining how fragile geographies become vulnerable when destination visibility precedes territorial preparation—a condition especially relevant in peri-metropolitan rural contexts of the Global South, where proximity to urban demand rapidly increases tourism pressure while fragmented institutions and limited local authority constrain the regulation of land use, infrastructure, water, waste and mobility.

Sampling and participants

Participants were recruited through purposive and theoretical sampling. Initial sampling sought maximum variation across three stakeholder domains central to the governance of rural tourism: private and livelihood actors, local and governmental institutions, and civil-society and informal-governance actors. As coding progressed, theoretical sampling pursued emerging categories: the in-vivo contrast of "weak locals versus connected outsiders" prompted the addition of council members and technical experts involved in permitting and demolition decisions, developing the category of selective legal enforcement, and recurrent accounts of unmanaged visitor surges prompted the recruitment of emergency workers and informal monitors to specify carrying-capacity breakdown.

Because the study addressed politically sensitive matters—selective enforcement, illegal construction, land sales and intra-community rivalry—recruitment depended on

trust. Initial access was negotiated through village councils, rural municipalities and trusted residents and guides, with subsequent participants reached through snowball referral within these networks; participants were assured of anonymity and the right to withhold information before sensitive topics were discussed.

The final corpus comprised 72 semi-structured interviews with participants distributed across five villages (Khor, Baraghan, Arangeh, Siahkalahan and Kandor). The sample spanned three stakeholder domains central to the governance of rural tourism: private and livelihood actors ($n = 30$; orchard owners, farmers, guesthouse operators, food and transport providers, and local real-estate brokers); local and governmental institutions ($n = 22$; village headmen, council members, rural municipality staff, and technical experts in environment, tourism and water); and civil society and informal governance ($n = 20$; local activists, environmental advocates, NGO representatives, informal monitors, elders and dispute mediators). A full breakdown by domain and participant code is provided in Appendix C. Of the 72 participants, 43 (60%) were men and 29 (40%) were women; women were under-represented, reflecting the male-dominated composition of village councils, brokerage networks and enforcement-facing roles in the study area. Recruitment continued until theoretical saturation was reached, judged not by numerical repetition alone, but by the analytical density of the categories, the recurrence of relationships across participant groups, and the capacity of the emerging model to explain negative, deviant or complicating cases.

Data collection

Data were generated through semi-structured interviews eliciting participants' accounts of how tourism had changed village life, land relations, environmental conditions, institutional responsibility and local trust. Questions were organised around broad themes rather than fixed variables—destination designation, infrastructure adequacy, interactions with agencies, perceived fairness of enforcement, land conversion, the distribution of benefits and costs, the role of social media, and governance alternatives (see Appendix A for the interview guide).

Interviews were conducted in Persian between March and September 2025, lasted 62 minutes on average (range 35–95) and were audio-recorded and transcribed verbatim with permission; detailed field notes replaced recording where it was not preferred. Field observations of congestion, riverbank use, waste accumulation and tourist movement served as contextual sensitising material situating interview accounts within the material geography of tourism pressure.

Data analysis

Data analysis proceeded iteratively alongside data collection, following the grounded theory principles of initial coding, focused coding, theoretical coding, constant comparison and memo-writing; coding and retrieval were managed in MAXQDA, which supported the audit trail without substituting for memo-driven interpretation. Initial coding fractured the data into incidents and actions, staying close to participants' language—responsibility-shifting, tourism without infrastructure, weak locals versus connected outsiders, selling land to strangers, social-media rush—and avoided forcing

the data into pre-existing concepts. To illustrate the trajectory: a resident's observation that visitors "find us through Instagram and Google, and then the whole valley is full" was coded as platform-mediated visibility, clustered through focused coding under platform-mediated destination visibility, and integrated into the theoretical category of digital overexposure (see Appendix B).

Focused coding then related the most significant initial codes to conditions, actions/interactions and consequences—a heuristic employed flexibly within Charmaz's (2014) constructivist logic rather than as a prescriptive axial paradigm. This clarified how top-down designation and fragmented mandates created a context in which selective enforcement could flourish; how land speculation, kinship politics and local land sales reproduced unsustainability; and how digital visibility intensified flows into villages lacking the capacity to absorb them. Constant comparison was conducted within and across groups—official accounts of legal restriction against residents' accounts of selective demolition, and expert accounts of fragmentation against local officials' descriptions of responsibility without authority.

In the final stage, theoretical coding integrated the three major themes around the core category of erosive governance in fragile geographies, refined through memo-writing, diagramming and repeated comparison between incidents and categories. The core category was retained because it accounted for the sequential and recursive relationships among the themes: institutional imposition created unprepared destinations; spatial rent transformed fragmented governance into unequal access to land and legal flexibility; and digital overexposure accelerated visitor flows, producing carrying-capacity breakdown and destination erosion. Memos documented category development, alternative explanations, negative cases and the boundary conditions of transferability.

Trustworthiness, reflexivity and negative cases

Several procedures were used to enhance trustworthiness; full protocols are documented in Appendices D and E. Credibility was strengthened through triangulation across participant domains and issue areas, constant comparison and the deliberate search for disconfirming evidence. Preliminary interpretations were returned to 15 participants (approximately 20% of each stakeholder domain) for member checking; their responses were used to refine category boundaries and sharpen the explanatory precision of the model rather than merely to ratify it. Coding was additionally reviewed by a second analyst (a co-author acting as peer debriefer), with divergences resolved through discussion and recoding. The analysis also incorporated negative cases showing that some local actors participated in unsustainability through land sales, kinship-based council politics and short-term responses to livelihood insecurity, preventing a simplified binary of external perpetrators and local victims.

Dependability was supported through a documented coding trail, and confirmability by linking claims to specific interview evidence while distinguishing participants' accounts from researcher interpretation. Reflexively, the researchers occupied a partial insider-outsider position—Persian-speaking and familiar with peri-metropolitan rural Iran, yet not residents of the studied villages—which eased access while shaping disclosure and interpretation; memos interrogated the researchers' assumptions,

including an initial inclination to read local land sales as victimisation, revised as negative cases accumulated. The gender composition of the evidence warrants attention: twelve of the thirteen participants quoted directly are men, mirroring male predominance in council, brokerage and enforcement-facing roles; women's encounters with tourism pressure are correspondingly under-represented, an asymmetry that bounds the model's account of social capacity breakdown. Transferability was supported through thick description of the case context.

Ethical considerations

The study followed standard ethical principles for qualitative research, including informed consent, voluntary participation, confidentiality and the right to withdraw. Participants were informed about the purpose of the research, the use of interview material in academic publication, and the measures taken to protect their identities. Given the sensitivity of issues such as selective enforcement, land conversion, institutional responsibility and local conflict, identifying details were removed or generalised where necessary. Ethical approval was obtained from the relevant institutional research ethics committee; the name of the institution, the approval code and the date of approval are withheld to preserve author anonymity during peer review and will be supplied upon acceptance. In addition, all procedures followed equivalent safeguards, including prior informed consent, anonymisation and secure storage of recordings, transcripts and field notes.

Results and discussion

The analysis generated three interrelated themes: institutional imposition and organisational irresponsibility, spatial rent and the local reproduction of unsustainability, and digital overexposure and carrying-capacity breakdown. Together, these themes constitute the core category of erosive governance in fragile geographies. The themes are presented below in their causal sequence. This sequencing does not imply a rigid linear model, but rather a processual ordering through which tourism unsustainability was produced, intensified and recursively reproduced in the Alborz mountain villages.

Institutional imposition and organisational irresponsibility

Across the interviews, the crisis was traced not simply to the moment visitor numbers increased, but to the earlier moment when villages were administratively identified, promoted or normalised as tourism destinations without adequate preparation. Tourism thus appeared not as a neutral economic opportunity, but as an act of governance with significant spatial consequences. Respondents repeatedly indicated that destination-making preceded the provision of basic facilities, institutional coordination and local consultation. As one expert stated, “The first thing that should be done before declaring a village as a tourism destination is to provide the basic facilities, beginning with public toilets” (GOV-01). A council member framed the same gap more sharply: “Tourism has been defined here unintentionally; it was not the demand of the people who live here. Someone at the top becomes responsible and turns this place into a tourism destination

without infrastructure” (GOV-02). These accounts reveal an initial mismatch between the institutional production of tourism visibility and the actual absorptive capacity of place. Villages were rendered visible as destinations before the infrastructure, sanitation, parking, traffic control, waste systems or participatory arrangements required to receive visitors were in place. For many residents, tourism was consequently experienced less as planned development than as externally imposed pressure that reorganised everyday life without local consent or spatial capacity.

This imposed destination-making was compounded by organisational fragmentation. Agencies responsible for environmental protection, natural resources, agriculture, housing, cultural heritage, rural development and local administration were described as acting through partial, overlapping and often conflicting mandates. Respondents referred to “different and sometimes contradictory regulations, which causes confusion in implementation,” and used terms such as “stonewalling,” “passing responsibility” and “overlap of organisational names and reputations” to describe the institutional field. These terms indicate more than administrative inconvenience. They reveal a governance setting in which multiple organisations possess partial authority, yet none accepts integrated responsibility for the consequences of tourism. The result was a paradoxical field of many rules but little effective regulation. Regulation was visible, but coordination was weak; authority was dispersed, but accountability remained unclear. This condition allowed institutions to retain formal jurisdiction while relocating responsibility to other agencies whenever problems emerged.

The sanitation issue became a particularly concrete example of how institutional fragmentation translated into everyday vulnerability. A village administrator captured the dilemma: “Tourists ask me where the toilet is. I cannot take them into my own house” (GOV-03). This statement is analytically important because it shows how an apparently mundane infrastructural deficit becomes a governance problem. Local authorities were expected to manage visitors, respond to complaints and absorb the social consequences of tourism, yet they lacked the legal, financial and administrative capacity to provide even minimum facilities. Environmental or land-use restrictions could prevent construction, while the absence of construction intensified pollution, resident frustration and uncontrolled use of gardens or open spaces. Thus, regulation designed in the name of protection could, under fragmented conditions, indirectly contribute to degradation. The issue was therefore not simply the absence of regulation, but the inability of regulatory institutions to coordinate protection with the practical requirements of visitor management.

This pattern produced what may be described as responsibility without authority. Local councils and rural municipalities were obliged to respond to waste, traffic, sanitation complaints, resident dissatisfaction and tourist behaviour, but they were not adequately empowered to regulate land use, allocate sufficient budgets, control visitor flows or resolve inter-institutional conflict. Residents, however, encountered the local state most directly through these visible local institutions. Dissatisfaction was therefore often directed at village councils, rural municipalities or local administrators, even though the binding constraints lay in distant, multi-level decision-making. This separation between visible responsibility and effective authority eroded local trust. The local state appeared present but ineffective; higher-level institutions appeared powerful

but distant; and residents were left to experience tourism as a pressure that no single institution could or would manage.

A limited counter-case qualifies this pattern. Where local actors had already secured minimal facilities, negotiated clearer responsibilities with relevant agencies, or informally coordinated visitor management before peak periods, tourism's disruptive effects were perceived as less severe. These instances do not overturn the broader pattern, but they show that designation does not inevitably produce erosion: erosion becomes likely when visibility precedes spatial preparation, responsibility is dispersed across poorly coordinated institutions, and local authorities must manage pressure without authority or resources. This negative evidence refines the model by showing that the problem is not tourism designation per se, but the institutional sequencing through which fragile rural places are exposed before they are governable.

Spatial rent and the local reproduction of unsustainability

The fragmented institutional context translated into unequal control over land, permits, legal protection and tourism-derived value. Rural space tied to farming, residence, inheritance and place-based identity was increasingly reconstituted as a speculative asset for non-local investors, villa owners, brokers and politically connected actors. This process is conceptualised here as spatial rent: the extraction of value from place through privileged access to land conversion, legal flexibility, institutional connections and proximity to metropolitan demand. In the Alborz villages, tourism did not simply diversify the rural economy; it reorganised the geography of value. Orchards, inherited smallholdings, riverbanks and village edges became attractive not only as lived or productive spaces, but as sites of future appreciation, leisure consumption and speculative investment. For residents, this transformation was not experienced as inclusive rural development. It was perceived as a process through which outsiders captured the most profitable dimensions of tourism, while many permanent residents absorbed the social, ecological and infrastructural costs.

A central mechanism through which spatial rent was produced was the selective implementation of law. Respondents did not describe regulation as absent; rather, they described it as socially differentiated and negotiable. Law appeared strict when applied to ordinary or weaker residents, yet flexible, delayed or ineffective when powerful non-local actors were involved. One resident captured the double standard: "For a weak local resident, they demolished a 20-square-metre room, but above it, a non-local person built a two-storey villa and nobody touched it" (PS-01). Another respondent explained how monetary power could neutralise restriction: "Someone who spends 50 billion on a villa does not care about a 200 or 300 million fine; he pays something higher up and they close their eyes" (GOV-04, council member). A third linked enforcement to institutional connections: "The person had connections in the Housing Foundation; he built a villa in the garden. They did not come until the construction was finished, and then they said a judicial order was needed" (GOV-05, council member). These accounts show that law did not operate as a uniform framework for protecting fragile rural space. For weaker residents, it appeared as demolition and surveillance; for connected actors, it became a negotiable, monetisable or delayable obstacle.

This differentiated legal geography intensified the conversion of rural space into a field of accumulation and exclusion. Landowners, villa builders, brokers and investors gained from rising prices, while many permanent residents faced higher housing costs, restricted construction rights, declining access to land and weakened agricultural livelihoods. The problem was not merely unequal income from tourism, but unequal capacity to transform and benefit from space. Those with money, connections or institutional access could convert landscape attractiveness into private value. Those without such access encountered tourism through congestion, waste, legal restriction, rising land prices and reduced influence over the future of the village. Spatial rent therefore functioned as a mediating mechanism between institutional fragmentation and destination erosion. Fragmented governance created openings; selective enforcement distributed those openings unevenly; and speculative actors transformed those openings into private advantage.

However, the data complicate any reading of local residents as uniformly passive victims of external capital. Several accounts indicated that local actors themselves participated in the reproduction of spatial rent, although often under structural pressure. One expert criticised local electoral politics: “The village council is structured in a way that has nothing to do with expertise or competence; I invite all my relatives, give them lunch, and they vote for me” (GOV-06). This account points to the role of kinship-based politics and non-meritocratic local leadership in weakening collective planning capacity. Another respondent described the erosion of older norms of territorial attachment: “The old attachment that said ‘do not sell your land to strangers’ has disappeared; now money speaks first” (PS-02, local resident). A third account revealed intra-community obstruction: “Locals cannot tolerate each other’s progress; they are enemies with themselves and friends with strangers. If I want to build something, my own neighbour reports me so the rural municipality comes and destroys it” (PS-03, local resident).

These accounts show that unsustainability was reproduced both vertically and horizontally. Vertically, it was reproduced through state fragmentation, selective enforcement, investor power and institutional connections. Horizontally, it was reproduced through kinship politics, local rivalries, land sales, short-term strategies and weak collective institutions. This finding is important because it avoids a simple victim–perpetrator binary. Local participation in unsustainability should not be interpreted as moral failure in isolation. It must be situated within precarious livelihoods, declining agricultural viability, limited employment, rising land values, weak trust and the absence of mechanisms for sharing tourism benefits equitably. Under such conditions, selling inherited land, cooperating with brokers or prioritising family-based political advantage may appear rational at the household or factional scale, even when it contributes to long-term collective erosion. The local reproduction of unsustainability therefore represents a situated response to structural insecurity and governance failure.

The second theme thus shows how institutional imposition becomes materially embedded in the rural landscape: the same fragmented system that fails to prepare villages also creates the legal and administrative ambiguity through which rural space is selectively appropriated. Spatial rent is therefore not a separate economic process added to tourism; it is one of the central mechanisms through which erosive governance operates.

Digital overexposure and carrying-capacity breakdown

The material consequences of institutional imposition and spatial rent converged in what the data indicate as carrying-capacity breakdown: a simultaneous exceeding of ecological, infrastructural, social and managerial thresholds. Degradation could not be reduced to individual tourist behaviour, although respondents frequently criticised damaging visitor practices. Rather, degradation followed from a structural mismatch between a promoted image, a village's actual absorptive capacity and institutions unable to regulate mobility, sanitation, water use, waste disposal and visitor concentration. The villages were presented and circulated as accessible mountain destinations, but they remained materially fragile and institutionally under-governed. Narrow roads, limited water resources, privately owned orchards, riverbanks, small settlement morphology and protected landscapes were exposed to mass recreational use without corresponding systems of control or protection. Capacity breakdown therefore referred not simply to "too many tourists," but to the collapse of the governance arrangements required to make visitor presence compatible with local life and ecological limits.

Digital platforms accelerated this exposure. Instagram, Google location services, online video, WhatsApp circulation and digital word-of-mouth were repeatedly named as channels through which limited or previously local destinations became widely visible. Digital media did not merely represent places; it actively participated in producing them as consumable tourism landscapes. As one respondent explained, "Ninety percent of this place's recognition has come from social media. You search 'Khor frozen waterfall' on Google, it gives you the location up to the waterfall, and then people rush in" (PS-04, local resident). A local guide noted the representational gap between online image and material reality: "The landscape is like the videos, but in terms of facilities, social media shows it much better than it really is" (CS-01). These quotations show how platforms separate the aesthetic visibility of place from its infrastructural limits. A waterfall, mountain road, riverbank or orchard landscape circulates online as an attractive visual object, while the absence of parking, toilets, waste systems, traffic control and local management remains largely invisible.

This process produced digital overexposure: fragile places became hyper-visible without becoming governable. The online image promised nature, accessibility and authenticity; the offline reality produced congestion, conflict, pollution and resident frustration. Digital circulation—geotagging, imagery and informal promotion—amplified the exposure already created institutionally in Theme 1; platforms did not create fragility by themselves, but accelerated flows into spaces whose institutional and infrastructural weaknesses had already been produced. In this sense, digital overexposure functioned as a catalyst that made underlying governance deficits more visible, more concentrated and more difficult to manage.

The consequences were most acute in water stress, traffic congestion, sanitation failure, waste accumulation and agricultural damage. Tourism pressure intersected directly with agrarian livelihoods. One council member stated: "Tourists puncture irrigation pipes to get water, while our farmers wait seventy days for their turn" (GOV-07). This quotation illustrates that tourism does not merely add water demand; it disrupts established agricultural allocation systems and intensifies livelihood insecurity.

Mobility pressures were similarly severe. Narrow mountain roads could not absorb peak visitor flows, and congestion became a matter of safety rather than inconvenience. An emergency worker reported: “The road does not have the capacity. On Fridays it is completely blocked; we had a cardiac patient who died because emergency services could not arrive” (GOV-08). This account demonstrates that capacity breakdown is not an abstract planning concept. It can become a direct threat to life, emergency access and local safety.

Waste and sanitation failures compounded the erosion. One respondent stated: “When I walk along the river, I feel sick; from diapers to soft-drink bottles, waste is everywhere” (GOV-09, emergency worker). Inadequate toilets pushed tourists toward gardens, river margins and open spaces. Improper disposal affected streams, orchards and storage pools, and uncontrolled movement blurred the boundary between recreational and private agricultural space. Residents experienced tourism as a disruption of the moral and material order of the village: gardens became toilets, irrigation pipes became tourist resources, roads became blocked corridors, and rivers became dumping spaces.

These impacts were cumulative rather than isolated: traffic restricted mobility and emergency access, water misuse threatened farming, waste polluted riverine landscapes, and sanitation failures degraded public health and dignity. This cumulative character is central to carrying-capacity breakdown—not one threshold exceeded, but ecological, infrastructural, social and managerial thresholds collapsing together. This is why respondents described tourism as having shifted from a source of potential benefit to a source of pressure, resentment and exhaustion.

Erosive Governance in Fragile Geographies

The three themes cohere around the core category of erosive governance in fragile geographies: a process through which governance systems do not merely fail to manage rural tourism sustainably but actively contribute to the exhaustion of the social, spatial, institutional and ecological capacities of destinations. Unsustainability in the Alborz villages is not adequately explained by visitor numbers, nor by infrastructural deficit understood as a purely technical problem. It is produced where tourism is declared, promoted or normalised before a destination has been consulted, materially prepared or territorially regulated, and where this initial mismatch between the institutional production of destination visibility and the absorptive capacity of place is intensified by fragmented mandates, responsibility-shifting, selective enforcement, spatial rent and digital overexposure. As represented in Figure 1, the relationship among the mechanisms is sequential, relational and recursive. Institutional imposition and organisational irresponsibility form the causal foundation, creating an unprepared destination and a dispersed governance field in which responsibility can be shifted; spatial rent and selective enforcement then allow the resulting space to be captured by actors with greater economic and political capacity while local fragmentation weakens collective resistance; and digital overexposure subsequently drives tourist flows into places left materially and institutionally defenceless, producing carrying-capacity breakdown and destination erosion. The model is not linear in a simple sense, however,

for it contains a feedback loop: as capacity breaks down, residents lose trust, collective action weakens, land is further commodified, and institutions become more reactive and defensive—outcomes that reinforce the very conditions that produced erosion. Fragility, in this account, is therefore not only physical and ecological but also institutional and relational; the Alborz villages became fragile not merely because of their mountain geography but because that geography was governed through centralised designation, fragmented authority, uneven law and unmanaged visibility.

This processual reading positions the study within, and against, the established literature on tourism governance. That decentralisation in developing countries can transfer responsibility without a commensurate transfer of authority, legitimacy or fiscal capacity was anticipated by Yüksel et al. (2005), while subsequent work has shown how hierarchical structures generate both vertical conflicts between central and local tiers and horizontal conflicts among local stakeholders (Wang et al., 2022). The present analysis converges with these accounts but departs from their implicit framing. In much of this literature, fragmentation is construed as a coordination deficit to be remedied through collaborative or networked governance (Bichler & Lösch, 2019; Keyim, 2018). The Alborz evidence inverts this assumption: fragmentation is not a defect that better coordination would cure but a productive condition that continuously manufactures displaceable responsibility—and is, in that sense, functional for the actors who benefit from it. Where many institutions hold partial mandates and none holds integrated accountability, the multiplicity of rules enables each actor to relocate blame, so that residents encounter the local state as visible yet ineffective. What the Alborz case adds is the recognition that this is not an unfortunate by-product of well-intentioned designation but the modal way unprepared destinations are produced.

The second mechanism extends rent gap theory into a setting for which it was not originally devised. Consistent with efforts to relocate the rent gap from the deindustrial inner city to rural and peri-metropolitan landscapes (Ristiawan et al., 2024) and to foreground the state's role in creating land markets and property regimes that channel value toward organised capital (Kan, 2021; Slater, 2017; Smith, 1979), the findings show orchards and inherited smallholdings being reconstituted as speculative assets for non-local investors. The distinctive contribution concerns the mechanism through which the gap is opened and closed. Whereas the urban literature emphasises deregulation, reinvestment and platform-mediated valorisation (Wachsmuth & Weisler, 2018), the present study identifies the selective non-enforcement of law as the decisive socio-spatial instrument: regulation operates as demolition and surveillance for weaker residents yet becomes a negotiable, monetisable obstacle for connected actors. This differentiated legal geography materialises spatial deprivation and exclusion in ways that resonate with analyses of rural homestay development as a process of spatial discipline and class differentiation (Bi & Yang, 2023). Crucially, the analysis resists a victim–perpetrator binary. Echoing evidence that rural tourism transformation often unfolds "beyond displacement," through ambivalent co-existence and negotiated benefit (Chen et al., 2024), the findings show local actors participating in rent reproduction through kinship-based council politics, land sales and mutual obstruction—not as moral

failure, but as a situated response to precarious livelihoods and the absence of viable collective institutions.

The third mechanism reframes destination erosion as the predictable landscape expression of the preceding processes rather than as an aggregate of individual tourist misbehaviour, reactivating the long critique of carrying capacity: the ambition to fix a defensible numerical threshold proved largely unrealisable (McCool & Lime, 2001); the managerial frameworks that succeeded it licensed creeping degradation (Butler, 1996); and contemporary overtourism merely renames concerns previously raised and abandoned (Butler, 2020; Wall, 2020). The Alborz case advances this debate by relocating the problem from the place to its governance: capacity is not a fixed attribute of the landscape awaiting more precise measurement but an institutional accomplishment—and where institutions are fragmented and imposed, it is one that is never accomplished. The water conflicts, blocked emergency access and riverine waste documented here closely parallel findings from protected-area rural tourism elsewhere, where inconsistent enforcement, inequitable building restrictions and water shortages were traced to poor planning rather than visitor volume alone (Zhang et al., 2026), and accord with longstanding evidence that tourism concentrates water demand in precisely the times and places where supply is most constrained (Gössling et al., 2012). What this study adds is the articulation of the digital register with the political-economic and managerial ones that the literatures have kept apart: social-media-induced visibility (Siegel et al., 2023) did not merely raise demand but rendered fragile places hyper-visible without rendering them governable, thereby exposing—and accelerating the consequences of—the inadequacy produced by institutional imposition and selective rent extraction.

Taken together, these findings support the formulation of erosive governance in fragile geographies as the study's principal contribution to the political economy of sustainable tourism and to tourism-governance scholarship. The concept is offered not as a synonym for governance failure but as a processual, substantive theory specifying how tourism injustice is produced and recursively reproduced: institutional imposition manufactures unprepared destinations; fragmented authority enables selective rent extraction; and digitally accelerated mobility overwhelms places left materially defenceless, with each stage eroding the trust, coordination and ecological protection on which the next depends. This framing contributes to sustainable tourism and tourism-governance scholarship, which increasingly treats tourism injustice as governance-informed, situated, patterned and collective rather than as an aggregation of discrete grievances, and it complements regenerative and pluriversal justice agendas advanced from the rural Global South (Lazic & Della Lucia, 2024). Its analytical value lies in linking three literatures that ordinarily proceed in isolation: overtourism, which describes a symptom; rural tourism gentrification, which describes a land dynamic; and digital tourism, which describes a representational and mobility dynamic. Erosive governance names the meta-mechanism that connects them. The theory is grounded in, and bounded by, the specific conditions of the Alborz villages—centralised yet fragmented authority, ecological fragility and proximity to metropolitan demand—and its transferability is therefore proposed analytically rather than statistically, as a

sensitising account applicable to comparable peri-metropolitan fragile geographies elsewhere.

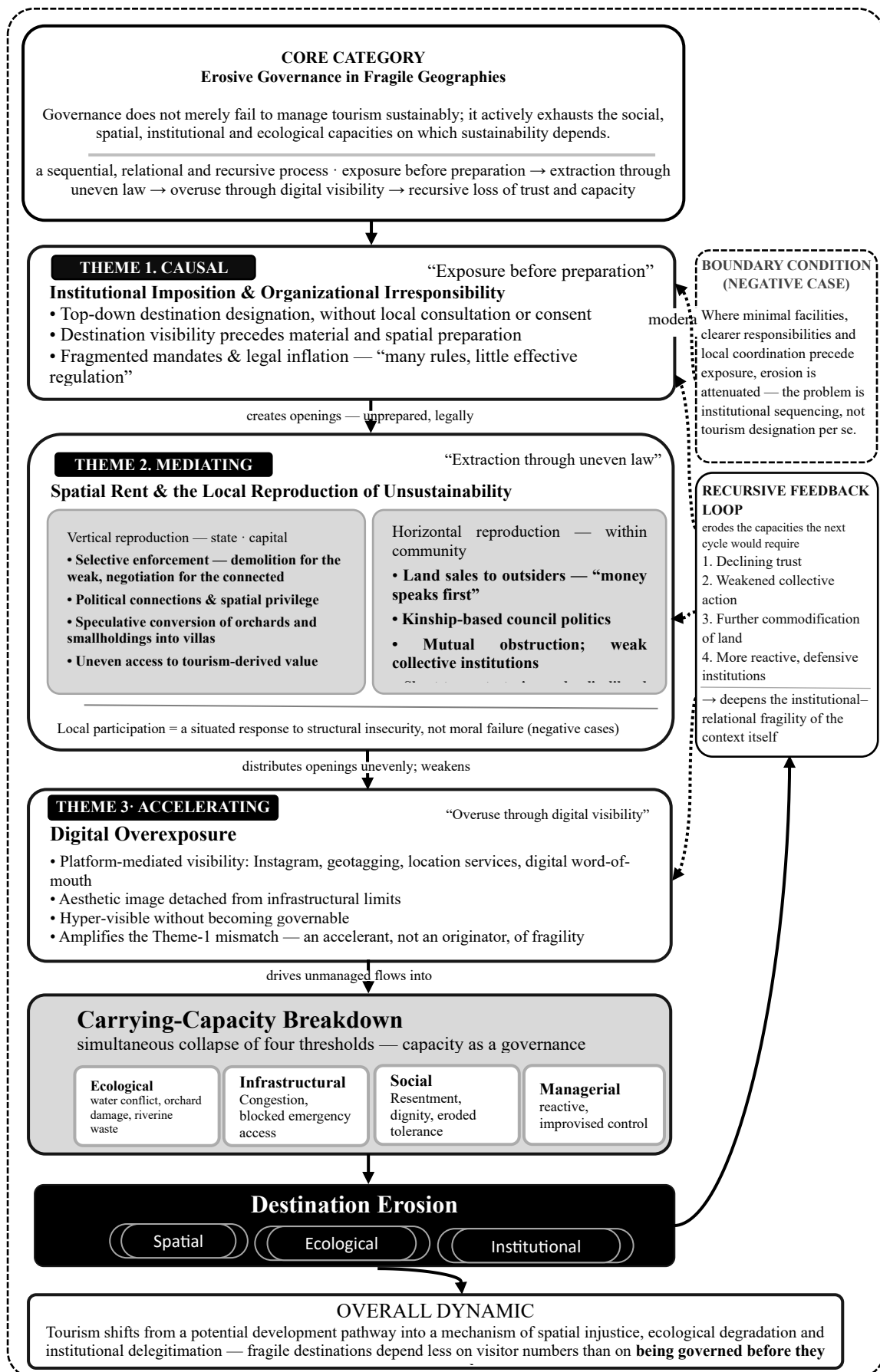


Figure 1. The recursive process of erosive governance in fragile geographies

Conclusion

This study set out to explain why tourism became a vector of unsustainability rather than development in the fragile mountain villages of Alborz, and it has argued that the answer lies less in visitor numbers than in a distinctive governance condition conceptualised here as *erosive governance in fragile geographies*. The grounded analysis identified a recursive sequence of three mutually reinforcing mechanisms: the institutional imposition of tourism space; the conversion of this unprepared, fragmented context into spatial rent through selective enforcement of law; and the digitally accelerated overexposure of fragile places, precipitating simultaneous ecological, infrastructural and managerial breakdown. Its principal contribution is to show that these processes — ordinarily examined separately as overtourism, rural gentrification and digital tourism — are causally linked through governance, such that carrying-capacity breakdown is not a property of place awaiting measurement but an outcome that fragmented, centrally dominated institutions systematically fail to prevent.

For policy and planning, fragile rural destinations require not promotional recognition but anticipatory, place-sensitive and capacity-based governance. Three priorities follow. First, reverse the sequence of destination-making: secure sanitation, water, traffic and waste infrastructure and participatory consent before a village is designated or promoted, not after. Second, consolidate accountability in a single, adequately resourced and legally empowered local authority, since dispersed and contradictory mandates allow responsibility to be endlessly displaced. Third, bring digital visibility within the scope of planning, treating geotagged promotion and platform-induced flows as forces that can outpace a destination's absorptive capacity. Underpinning all three is a redistribution of both regulatory burden and tourism-derived benefit, consistent with calls to treat tourism injustice as governance-informed and collective.

Several limitations qualify these conclusions. As a grounded, qualitative study, the analysis privileges interpretive depth over statistical generalisation; its transferability is therefore proposed analytically rather than empirically across comparable fragile geographies combining ecological vulnerability, fragmented authority and metropolitan proximity. The evidence is predominantly perceptual and narrative: the causal sequencing at the heart of the erosive-governance model is therefore an interpretive reconstruction, consistent with grounded theory; the model is offered as an analytically plausible and transferable explanation to be tested further, not as a statistically verified causal chain. Future work could test and refine the erosive-governance model through longitudinal designs, mixed-method triangulation incorporating remote sensing and spatial analysis of land-use change, and comparative study across national governance regimes. Research attentive to the agency of local actors would further illuminate the horizontal reproduction of unsustainability. Ultimately, the value of the erosive-governance framework lies in its insistence that the sustainability of fragile rural tourism is decided not at the moment visitors arrive, but in the prior institutional choices that determine whether a place is governed before it is exposed.

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Authors' Contribution

All authors contributed equally to the preparation of this manuscript.

Conflict of Interest

The authors declare that there is no conflict of interest.

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References

- Bi, G., & Yang, Q. (2023). The spatial production of rural settlements as rural homestays in the context of rural revitalization: Evidence from a rural tourism experiment in a Chinese village. *Land Use Policy*, 128, 106600. <https://doi.org/10.1016/j.landusepol.2023.106600>
- Bichler, B. F., & Lösch, M. (2019). Collaborative governance in tourism: Empirical insights into a community-oriented destination. *Sustainability*, 11(23), 6673. <https://doi.org/10.3390/su11236673>
- Boy, J. D., & Uitermark, J. (2017). Reassembling the city through Instagram. *Transactions of the Institute of British Geographers*, 42(4), 612–624. <https://doi.org/10.1111/tran.12185>
- Butler, R. W. (1996). The concept of carrying capacity for tourism destinations: Dead or merely buried?. *Progress in Tourism and Hospitality Research*, 2(3–4), 283–293. <https://doi.org/10.1002/pt.6070020309>
- Butler, R. W. (2020). Tourism carrying capacity research: A perspective article. *Tourism Review*, 75(1), 207–211. <https://doi.org/10.1108/TR-05-2019-0194>
- Cao, L. (2024). From online to onsite: Wanghong economy as the new engine driving China's urban development. *Environment and Planning A: Economy and Space*, 56 (4), 1061–1076. <https://doi.org/10.1177/0308518X231224142>
- Charmaz, K. (2014). *Constructing grounded theory*. (2nd ed.). Sage.
- Chen, P., Zhang, M., & Wang, Y. (2024). Beyond displacement: The co-existence of newcomers and local residents in the process of rural tourism gentrification in China. *Journal of Sustainable Tourism*, 32(1), 8–26. <https://doi.org/10.1080/09669582.2022.2112201>
- Gao, J., & Wu, B. (2017). Revitalizing traditional villages through rural tourism: A case study of Yuanjia Village, Shaanxi Province, China. *Tourism Management*, 63, 223–233. <https://doi.org/10.1016/j.tourman.2017.04.003>
- Gössling, S., Peeters, P., Hall, C. M., Ceron, J.-P., Dubois, G., Lehmann, L. V., & Scott, D. (2012). Tourism and water use: Supply, demand, and security. An international review. *Tourism Management*, 33(1), 1–15. <https://doi.org/10.1016/j.tourman.2011.03.015>
- Kan, K. (2021). Creating land markets for rural revitalization: Land transfer, property rights and gentrification in China. *Journal of Rural Studies*, 81, 68–77. <https://doi.org/10.1016/j.jrurstud.2020.08.006>
- Keyim, P. (2018). Tourism collaborative governance and rural community development in Finland: The case of Vuonislahti. *Journal of Travel Research*, 57(4), 483–494. <https://doi.org/10.1177/0047287517701858>
- Koens, K., Postma, A., & Papp, B. (2018). Is overtourism overused? Understanding the impact of tourism in a city context. *Sustainability*, 10(12), 4384. <https://doi.org/10.3390/su10124384>
- Lazic, S., & Della Lucia, M. (2024). A holistic and pluralistic perspective for justice through tourism: A regenerative approach. *Tourism Geographies*. Advance online publication. <https://doi.org/10.1080/14616688.2024.2372114>
- Ma, J., & Wu, Z. (2026). Platformized tourism circuits and urban space: Xiaohongshu, Wanghong places, and Dongshankou's transformation. *Journal of Travel Research*. Advance online publication. <https://doi.org/10.1177/00472875251408445>

- McCool, S. F. (1994). Planning for sustainable nature dependent tourism development: The Limits of Acceptable Change system. *Tourism Recreation Research*, 19(2), 51–55. <https://doi.org/10.1080/02508281.1994.11014708>
- McCool, S. F., & Lime, D. W. (2001). Tourism carrying capacity: Tempting fantasy or useful reality? *Journal of Sustainable Tourism*, 9(5), 372–388. <https://doi.org/10.1080/09669580108667409>
- Mihalič, T. (2020). Conceptualising overtourism: A sustainability approach. *Annals of Tourism Research*, 84, 103025. <https://doi.org/10.1016/j.annals.2020.103025>
- Molin, L. U., Selvaag, S. K., & Aas, Ø. (2025). How Instagram shapes visitors' relation to wild places. *Tourism Geographies*, 27(8), 1664–1679. <https://doi.org/10.1080/14616688.2025.2582644>
- O'Reilly, A. M. (1986). Tourism carrying capacity: Concept and issues. *Tourism Management*, 7(4), 254–258. [https://doi.org/10.1016/0261-5177\(86\)90035-X](https://doi.org/10.1016/0261-5177(86)90035-X)
- Risager, B. S. (2022). Rent gap governance: State-led gentrification in the Danish 'ghetto'. *City*, 26(2–3), 199–223. <https://doi.org/10.1080/13604813.2022.2042638>
- Ristiawan, R., Huijbens, E. H., & Peters, K. (2024). Apprehending land value through tourism in Indonesia: Commodification of rural landscapes through geoparks. *Tijdschrift voor Economische en Sociale Geografie*, 115(1), 170–186. <https://doi.org/10.1111/tesg.12597>
- Siegel, L. A., Tussyadiah, I. P., & Scarles, C. (2023). Exploring behaviors of social media-induced tourists and the use of behavioral interventions as salient destination response strategy. *Journal of Destination Marketing & Management*, 27, 100765. <https://doi.org/10.1016/j.jdmm.2023.100765>
- Slater, T. (2017). Planetary rent gaps. *Antipode*, 49(S1), 114–137. <https://doi.org/10.1111/anti.12185>
- Smith, N. (1979). Toward a theory of gentrification: A back to the city movement by capital, not people. *Journal of the American Planning Association*, 45(4), 538–548. <https://doi.org/10.1080/01944367908977002>
- Smith, S. P. (2021). Landscapes for “likes”: Capitalizing on travel with Instagram. *Social Semiotics*, 31(4), 604–624. <https://doi.org/10.1080/10350330.2019.1664579>
- Stankey, G. H., Cole, D. N., Lucas, R. C., Petersen, M. E., & Frissell, S. S. (1985). *The Limits of Acceptable Change (LAC) system for wilderness planning* (General Technical Report INT-176). U.S. Department of Agriculture, Forest Service, Intermountain Forest and Range Experiment Station.
- Wachsmuth, D., & Weisler, A. (2018). Airbnb and the rent gap: Gentrification through the sharing economy. *Environment and Planning A: Economy and Space*, 50(6), 1147–1170. <https://doi.org/10.1177/0308518X18778038>
- Wall, G. (2020). From carrying capacity to overtourism: A perspective article. *Tourism Review*, 75(1), 212–215. <https://doi.org/10.1108/TR-08-2019-0356>
- Wang, H., Zhang, B., & Qiu, H. (2022). How a hierarchical governance structure influences cultural heritage destination sustainability: A context of red tourism in China. *Journal of Hospitality and Tourism Management*, 50, 421–432. <https://doi.org/10.1016/j.jhtm.2022.02.002>
- Yang, X. S., Xiang, L., & Xu, H. (2025). “Only good for taking photos?”: Understanding the production and evolution of Wanghong tourism destinations in the digital era. *Tourist Studies*, 25(3), 324–343. <https://doi.org/10.1177/14687976251372709>
- Yüksel, F., Bramwell, B., & Yüksel, A. (2005). Centralized and decentralized tourism governance in Turkey. *Annals of Tourism Research*, 32(4), 859–886. <https://doi.org/10.1016/j.annals.2004.09.006>
- Zhang, Y., Hanna, P., & Vanclay, F. (2026). The social and environmental impacts on local residents from tourist accommodation near protected areas. *Environmental Management*, 76, 83. <https://doi.org/10.1007/s00267-026-02385-5>