

DAOIST ECO-ETHICS AND SUSTAINABLE TOURISM DEVELOPMENT IN WETLAND ECOSYSTEMS: LESSONS FROM TRAM CHIM

MA. Vo Nguyen THONG

Lecturer in Tourism, Faculty of Culture - Tourism and Social Work,
Dong Thap University, Vietnam

Email: vnthong@dtu.edu.vn

ORCID ID: <https://orcid.org/0009-0007-4043-0629>

Abstract: This paper investigates the integration of Daoist eco-ethics into the framework of sustainable tourism development within the Tram Chim Ramsar site, Dong Thap Province. The wetland ecosystem of Tram Chim, characterized by its profound biodiversity and serving as the critical habitat for the endangered Sarus Crane, currently faces severe pressures from anthropocentric expansion and commercial tourism overexploitation. Grounded in field surveys and carrying capacity assessments derived from the foundational master's thesis, this study conceptualizes a novel theoretical paradigm synthesizing core Daoist tenets: *Ziran* (Spontaneity), *Wu-wei* (Non-coercive action), and *Tian-ren-he-yi* (Cosmic unity of Heaven, Earth, and Humanity). This philosophical ontology asserts that humanity is not a dominant hegemon but rather an organic, interconnected component within the holistic ecological flow. The findings indicate that operationalizing *Wu-wei*—by mitigating aggressive artificial interventions and strictly enforcing ecological carrying capacity limits—effectively preserves the pristine wetland biome while optimizing sustainable livelihoods for local buffer-zone communities. This study provides a distinct philosophical perspective for Vietnam's tourism sector, arguing that ancient eco-centric ethics hold the definitive key to resolving the dialectical tension between conservation and development in international wetlands.

Keywords: *Daoist Eco-ethics; Sustainable Tourism; Wetland Ecosystems; Tram Chim Ramsar Site; Tian-ren-he-yi.*

1. INTRODUCTION

In an era marked by rapid economic expansion, global wetland ecosystems suffer profound degradation caused by a mechanistic, anthropocentric drive to conquer nature. Tram Chim National Park, designated as the world's 2,000th Ramsar site and the 4th in Vietnam, represents a microcosm of the historically rich and biodiverse wetlands of the Plain of Reeds (*Dong Thap Muoi*). This protected biome harbors over 200 bird species and invaluable endemic flora. However, contemporary tourism development at Tram Chim reveals critical paradoxes: uncoordinated management and resource commodification have severely disrupted the ecological matrix, threatening the survival of key species like the Sarus Crane. Nguyen and Le (2011) highlighted that ecotourism in Tram Chim must fundamentally align with wetland conservation to safeguard the intrinsic ecological values of this fragile landscape. This empirical reality necessitates a profound paradigm shift from utilitarian exploitation toward a deeply philosophical eco-ethics.

Daoist eco-ethics offers a profound ontological foundation to re-engineer ecotourism within environmentally sensitive regions. The core of Daoist philosophy revolves around the concept of the *Dao*—the ultimate source and immanent order of the cosmos, wherein nature exists spontaneously and autonomously (*Ziran*). The ancient philosopher Laozi (1993), in the *Dao De Jing*, asserted that humanity must conform to natural laws, stating that "Humanity follows Earth, Earth follows Heaven, Heaven follows the Dao, and the Dao follows Ziran." This philosophical framework deconstructs human supremacy, promoting *Tian-ren-he-yi* to achieve a dynamic equilibrium between human agency and the biosphere. Addressing modern environmental crises, Callicott (1994) argued that Eastern intellectual

traditions, particularly Daoism, provide powerful conceptual tools that surpass Western dualism by granting intrinsic value to non-human entities.

When applied to wetland tourism management, the doctrine of *Wu-wei* (non-coercive action) does not imply passive inaction; rather, it dictates acting in accordance with natural trajectories without imposing violent artificial alterations, thereby respecting the ecosystem's internal carrying capacity. Quantifying the ecological carrying capacity prior to designing tourism products constitutes a crucial step imbued with the spirit of *Wu-wei*. This approach aligns with the sustainable tourism theory of Pham et al. (2002), which maintains that ecotourism in Vietnam can only achieve long-term viability when biodiversity conservation is structurally harmonized with local community development. Furthermore, the co-management and active participation of buffer-zone residents, driven by an eco-centric responsibility, remain paramount. Consequently, this study utilizes a Daoist philosophical lens to evaluate the ecological status of tourism in Tram Chim, offering strategic solutions to transform local tourism into an integrated process of harmony between humanity and the wetland environment. As Palmer (1998) concluded, reviving the Daoist reverence for the natural world offers a fundamental blueprint for the sustainable coexistence of humanity within a finite planetary ecosystem.

2. LITERATURE REVIEW

The dialectical relationship between tourism development and ecological conservation in wetland ecosystems has attracted significant academic attention globally for several decades. Numerous empirical studies have demonstrated that wetlands are highly sensitive ecological entities, intrinsically vulnerable to anthropocentric disturbances generated by mass tourism (Mitsch & Gosselink, 2015). In the context of contemporary ecotourism, seeking a dynamic equilibrium between optimizing economic benefits for local communities and maintaining habitat integrity remains a systemic challenge. According to Buckley (2012), ecotourism within protected natural areas achieves true sustainability only when its management structure integrates rigorous indicators regarding environmental carrying capacity and actively mitigates interest conflicts among stakeholders.

In Vietnam, academic literature concerning wetland ecosystems, specifically the Plain of Reeds (*Dong Thap Muoi*) and the Tram Chim Ramsar site, predominantly focuses on biological domains and environmental resource management. Nguyen et al. (2018) indicated that the decline of biodiversity at Tram Chim, exemplified by the gradual absence of the Eastern Sarus Crane (*Grus antigone*), is closely linked to artificial hydrological modifications and livelihood pressures from buffer-zone residents. Conversely, domestically proposed solutions to attract tourists often adapt anthropocentric and utilitarian orientations. As Pham (2014) argued, the majority of tourism development models within Vietnamese national parks remain highly commercialized, lacking a profound ecological ethics framework to guide the behaviors of both tourists and policymakers.

In recent years, the paradigm shift toward integrating Eastern philosophy into contemporary ecology has opened groundbreaking research avenues. International scholars have begun to recognize Daoism not merely as a mystical religion, but as a comprehensive and progressive eco-centric ethical system. The seminal study by Miller (2017) on "Daoist Ecology" demonstrated that ancient philosophical concepts possess the capacity to provide a solid ontological foundation to address global environmental crises by redefining humanity's position within nature. Similarly, when applied to tourism research, Dang (2020) asserted that incorporating Daoist principles, such as the complementarity of Yin and Yang or spiritual tranquility, into wellness and ecotourism not only enhances tourists' spiritual experiences but also fosters a reverent behavior toward non-human life forms.

3. THEORETICAL FRAMEWORK

The theoretical framework of this study is constructed upon the academic symbiosis between modern Sustainable Tourism Theory and Daoist Eco-ethics. Daoist eco-ethics operates upon three core philosophical pillars: *Ziran* (Spontaneity/Nature), *Wu-wei* (Non-coercive action), and *Tian-ren-he-yi* (Cosmic unity of Heaven, Earth, and Humanity). The concept of *Ziran* in the philosophy of Laozi (1993) is not merely the external environmental landscape; it represents an autonomous, self-generating, and

self-sustaining state operating according to the intrinsic laws of the cosmos without human artificial imposition. Applied to the Tram Chim ecosystem, *Ziran* demands that tourism activities absolute respect the natural flooding regimes, the wild growth of endemic flora such as wild rice (*Oryza rufipogon*) and Melaleuca forests, and the migratory cycles of waterfowl.

The second pillar is the principle of *Wu-wei*, a concept frequently misinterpreted as passive inaction. In Daoist thought, *Wu-wei* signifies "non-coercive action"—acting fluidly in accordance with natural trajectories without imposing subjective human desires (Zhuangzi, 2003). In contrast to mechanistic modern tourism, which seeks to urbanize and concretize landscapes for human comfort, *Wu-wei* provides a revolutionary ecotourism governance philosophy. It guides managers to implement harmonious architectural solutions, minimize permanent construction, and strictly regulate the density of motorized boats, replacing them with quiet transportation methods that blend into the wetland acoustic environment. This approach structurally aligns with the Limits of Acceptable Change (LAC) model within Western sustainable tourism theory conceptualized by Stankey et al. (1985).

The supreme pillar of this paradigm is the ontological state of *Tian-ren-he-yi*. This philosophy deconstructs Western dualistic thinking that separates humanity from nature, which serves as the root cause of destructive exploitation. According to Callicott and Ames (1989), Eastern environmental philosophy views the world as a unified living organism wherein humans and natural entities share an organic symbiotic relationship. Within the tourism space of Tram Chim, tourists and local communities do not act as consumers of the landscape, but rather as harmonious components within the holistic ecology of the Plain of Reeds. This reverence elevates standard ecotourism into "Daoist/Zen Tourism," where individuals achieve mental healing by shedding the "dust of time" to merge with nature, a practice of environmental spirituality revival that Palmer (2001) termed eco-theology.

Finally, the framework integrates the Ecological Carrying Capacity model by Ceballos-Lascuráin (1996) to quantify these philosophical principles. This synthesis creates an ethical-technical feedback loop: Daoist philosophy establishes an internal mindset of self-restraint (*Zhi-zu* or contentment), while mathematical models calculate concrete physical boundaries for tourist numbers. This integration ensures that tourist flows at Tram Chim never exceed the biome's thresholds, preserving the dynamic Yin-Yang equilibrium of the entire ecosystem.

4. RESEARCH METHODOLOGY

This study adopts an interdisciplinary mixed-methods approach, combining the empirical measurement techniques of Western tourism sciences with the cultural-philosophical interpretative methods of the East. The research site is restricted to the Tram Chim Ramsar Site, Tam Nong District, Dong Thap Province, a characteristic wetland biome spanning over 7,313 hectares. To evaluate tourism behaviors and ecological consciousness through a Daoist lens, this study utilizes questionnaires and in-depth interviews with diverse stakeholders, including park managers, tour operators, tourists, and buffer-zone residents.

To operationalize the principle of *Wu-wei* and regulate ecological carrying capacity, the study employs formulas to calculate Physical Carrying Capacity (PCC) and Real Carrying Capacity (RCC) based on standardized frameworks by Bauer (2014). This mathematical model integrates specific environmental variables of Tram Chim, such as habitat sensitivity coefficients during wet and dry seasons, waterfowl nesting periods, and vessel noise thresholds. Secondary data regarding biodiversity, endemic plant density (e.g., *Xyris indica*, wild rice), and Sarus Crane sighting frequencies were collected from Tram Chim National Park scientific reports (2015–2025) to perform correlation analyses with tourist volume fluctuations over time.

Beyond quantitative methods, this study emphasizes qualitative inquiry through Philosophical Discourse Analysis and In-depth Interviews. This methodology is grounded in the qualitative research design framework of Creswell & Creswell (2018) to decode how Daoist natural ethics translate into concrete codes of conduct for tourists and co-management livelihood models for local communities. In-depth interviews conducted with 15 ecotourism experts and local elders clarify indigenous knowledge systems that manifest "nature-aligned" (*thuận thiên*) philosophies throughout history. Finally, quantitative data processing is executed via SPSS software, while qualitative data undergoes thematic

matrix analysis following guidelines by Braun & Clarke (2006), ensuring academic objectivity and high precision in the proposed strategic solutions.

5. RESULTS AND DISCUSSION

5.1. The Empirical Reality of Anthropogenic Pressures on the "Dao of Nature" (Ziran) at Tram Chim

The empirical data fluctuations captured at the Tram Chim Ramsar site between 2015 and 2025 expose a profound paradox between the mechanistic growth of the tourism sector and the systemic degradation of the ecological matrix. According to current environmental baseline records, tourist inflows into Tram Chim are highly concentrated during the annual floating season (September to November), imposing an extreme anthropogenic payload onto the core heritage zones. The exponential surge in motorized ecotourism vessels (*vỏ lãi*) propelled by internal combustion engines has directly induced widespread high-frequency acoustic pollution and persistent superficial oil sheen contamination. Biological correlation analysis demonstrates that the operational density of tour vessels is inversely proportional to the occurrence frequency and residence duration of the endangered Eastern Sarus Crane (*Grus antigone*), while simultaneously fracturing the wild architecture of endemic floral communities such as wild rice (*Oryza rufipogon*) and Eleocharis grasslands (Nguyen & Le, 2011). This severe habitat fragmentation reflects a profoundly utilitarian approach that prioritizes short-term economic gains over biosphere integrity (Mitsch & Gosselink, 2015).

Acoustic mapping within strictly protected zones like A1 and A5 reveals that noise emissions from tourist vessel engines frequently exceed 75 dBA, completely breaching the auditory thresholds and nesting instincts of rare waterfowl. When pristine, quiet environments are invaded by mechanical disturbances, natural biological cycles are disrupted, forcing avian populations to migrate to lower-quality habitats. This violent disruption constitutes a systemic injury to modern national park management theory, which demands a strict spatial decoupling between visitor experiential zones and ecological restoration areas (Buckley, 2012). The loss of biodiversity within inland wetland ecosystems caused by mass ecotourism is no longer a theoretical risk but an empirical reality necessitating a fundamental paradigm shift in environmental governance (Nguyen et al., 2018).

From a Daoist ontological perspective, these ecological conflicts represent the inevitable consequence of aggressive human desires and domain-seeking behaviors (*nhân vi*) imposing themselves upon the spontaneous order of the cosmos (*Ziran*). Daoist philosophy emphasizes that *Ziran* is not a passive, inanimate object for humanity to appropriate and manipulate according to subjective human will; rather, it is a self-generating, autonomous entity possessing an inherent harmonious order generated by the cosmic flow of the *Dao* (Laozi, 1993). The contemporary tourism model at Tram Chim treats this international wetland as a commodified landscape designed primarily for human consumption. The imposition of artificial interventions and motorized transportation networks cuts through the flooded topographical matrix, fracturing the natural circulation of vital energy and destroying the sacred symbiosis among all living things that Zhuangzi (2003) termed the loss of primordial purity.

The continuous decline of crane populations and the degeneration of endemic flora in the Plain of Reeds (*Dong Thap Muoi*) serve as critical biological indicators warning that the internal vital force (*Qi*) of the ecosystem is being suffocated. When humanity, under the guise of development, usurps the existential space of non-human entities, it alienates itself from the holistic living organism of nature. Environmental crises at ecotourism destinations stem from the absence of a binding ethical value system, which reduces the intrinsic value of the biosphere to a mere instrument for selfish human indulgence (Pham, 2014). Without a cognitive revolution to deconstruct the anthropocentric paradigm, pure technical interventions remain futile, and commercial overexploitation will permanently mute the vital lifespans and exhaust the supreme existential energy (*Qi*) of the Tram Chim wetland ecosystem (Miller, 2017).

5.2. Quantifying Ecological Carrying Capacity through the Lens of "Contentment" (Zhi-zu)

To transform Daoist philosophical principles into operational regulatory instruments, quantifying Physical Carrying Capacity (PCC) and Real Carrying Capacity (RCC) becomes an urgent

imperative within sustainable destination management structures. Mathematical calculations for key ecological sub-areas, including A1, A2, and A5, derived from field data, reveal significant mechanical overcapacity during peak ecotourism periods. The ecological carrying capacity model does not merely measure visitor density per unit area; it systematically integrates sensitive environmental correction coefficients, such as flooding regimes, endemic vegetation growth cycles, and safety radii for wild avian habitats (Ceballos-Lascuráin, 1996). The systematic threshold breaches of the RCC index in sensitive sub-areas during waterfowl breeding seasons demonstrate that current tourism operations extensively exceed nature's self-regenerative thresholds, threatening the sustainability of the entire biological architecture (Bauer, 2014).

These quantitative metrics provide an objective scientific baseline to operationalize the ancient Daoist eco-ethical concept of "Contentment" (*Zhi-zu*). Within Western market-driven economic frameworks, visitor volume growth is frequently treated as the supreme indicator of destination success, driving an infinitely expanding tourism demand function. Conversely, Eastern environmental philosophy positions human self-restraint and the containment of material desires as the prerequisite for maintaining global ecological harmony (Callicott & Ames, 1989). Integrating the strict limits of RCC into local management policies and itinerary planning at Tram Chim represents a technical manifestation of Laozi's immortal warning in the *Dao De Jing*: "He who knows contentment will meet with no disgrace; he who knows when to stop will be free from danger; thus can he endure long" (Laozi, 1993). The mathematical thresholds of carrying capacity do not function as economic restrictions; rather, they establish an ethical-technical feedback loop necessary to preserve the dynamic Yin-Yang equilibrium between anthropocentric demands and biosphere endurance.

When referenced against modern sustainable tourism policy frameworks, the philosophy of *Zhi-zu* aligns structurally with the Limits of Acceptable Change (LAC) model, which maintains that environmental management must shift from maximizing output toward managing impacts and identifying appropriate ecological stops (Stankey et al., 1985). Ignoring carrying capacity limits to pursue mass commercialization reflects a degradation of cognitive awareness, transforming humanity from a harmonious component into a malignancy destroying the living natural body. Sustainable tourism development in sensitive wetlands requires a rigorous co-management mechanism wherein the livelihoods of buffer-zone communities and ecosystem integrity are integrated into a single unified whole (Pham et al., 2002). True sustainability is achieved only when managers, operators, and tourists share a profound reverence for life, voluntarily limiting behaviors to safeguard the intrinsic value of the non-human world (Palmer, 2001).

Furthermore, operationalizing carrying capacity models based on *Zhi-zu* requires the Tram Chim National Park management to execute a dynamic visitor flow coordination strategy. Specifically, during periods of heightened biological sensitivity, internal tour routes traversing the core habitats of the Sarus Crane must be closed or severely restricted, restoring absolute tranquility to the biosphere. Reshaping visitor behavior through philosophically enriched environmental education will transform consumer awareness from that of a "landscape consumer" to an "ecological pilgrim." This integrated mixed-methods approach ensures empirical precision in monitoring environmental degradation indices (Creswell & Creswell, 2018) while elevating Ramsar wetland conservation into an act of supreme ethical practice, reconciling human livelihood with the finite boundaries of the living planet.

5.3. Materializing "Wu-wei Tourism": Empirical Demand and Innovative Product Design

Empirical questionnaire data decoding tourist motivations and behaviors at the Tram Chim Ramsar site indicates a significant paradigmatic shift toward sensory, low-impact wellness experiences. According to the sociological survey findings derived from the foundational thesis, a substantial majority of domestic and international visitors express discontent with artificial recreational infrastructures, preferring instead to seek psychological and spiritual tranquility within pristine environments. Tourists increasingly demonstrate a preference for destinations characterized by natural soundscapes—such as bird calls, wind-rustled grasslands, and interactive mindfulness practices—over commercialized, concrete-dominated facilities. This empirical demand justifies the urgent necessity of abandoning mechanized tourism models, while operationalizing the conceptualization of "Wu-wei

Tourism" (Non-coercive Tourism) as a transformative strategic solution to elevate destination value (Ceballos-Lascuráin, 1996).

Within contemporary ecotourism governance, regulating visitor behaviors through authentic sensory stimuli is evolving into a proactive conservation methodology. Designing tourism products based on intrinsic natural attributes effectively mitigates structural conflicts between anthropocentric recreational demands and the ecological thresholds of wild fauna and flora (Buckley, 2012). This demand shift is not merely a transient consumer trend; it reflects a deeper philosophical inclination to return to the intrinsic value of the natural world, wherein individuals seek to ameliorate psychological alienation induced by urban pressures through reunification with pristine ecosystems (Miller, 2017).

The doctrine of *Wu-wei* (non-coercive action) in environmental governance does not imply passive inaction; rather, it dictates a philosophy of minimal artificial intervention, fluidly adapting to natural trajectories without human egoistic imposition (Zhuangzi, 2003). Consequently, this study proposes a fundamental restructuring of tourism products at Tram Chim: entirely replacing motorized vessels with traditional, non-mechanized wooden hand-rowed boats, and substituting concrete walkways with elevated, biodegradable wooden pathways that adapt dynamically to the flooding regimes of the Plain of Reeds (*Dong Thap Muoi*). This "Wu-wei" infrastructural design allows tourists to engage in deep forest bathing (*Shinrin-yoku*), deep listening, and contemplative mindfulness amidst the flooded grasslands. Shedding the "dust of time" (*rũ bụi thời gian*) within these silent sanctuaries transcends conventional ecotourism paradigms, transforming the travel experience into a profound ritual of spiritual healing and cosmic reunification, thereby reflecting the supreme Daoist art of living in alignment with nature (Laozi, 1993).

Eliminating aggressive mechanical and artificial elements restores the original existential space of non-human entities. When ecological soundscapes are returned to their primordial *Wu-wei* tranquility, waterfowl and particularly the Sarus Crane are no longer expelled by negative human stimuli. Designing tourism products based on the containment of human intervention constitutes a brilliant manifestation of Eastern eco-ethics (Dang, 2020). This structure establishes a bidirectional healing matrix: nature is healed from the wounds of urban encroachment, while humanity is emancipated from spiritual alienation by surrendering to and dissolving into the eternal flow of the *Dao*.

5.4. Community-Based Co-management: Operationalizing the Cosmic Unity of "Tian-ren-he-yi"

The evaluation of socio-economic data from buffer-zone communities in Tam Nong District highlights a critical reality: the sustainability of conservation efforts at the Tram Chim Ramsar site is deeply contingent upon integrating local livelihoods into the ecotourism value chain. Field analyses from the foundational thesis indicate that when local economic benefits are decoupled from national park preservation, extractive practices such as illegal fishing and wildlife poaching increase as a survival mechanism. Therefore, transitioning local residents from conflicting, extractive actors into strategic stakeholders within the ecotourism supply chain—including hand-rowed boat operations, indigenous eco-gastronomy, and heritage guiding—significantly enhances both household incomes and conservation compliance rates (Nguyen & Le, 2011).

This symbiotic relationship bridges the artificial dualistic divide between human survival and environmental preservation, seamlessly operationalizing the supreme Daoist ideal of *Tian-ren-he-yi* (the ontological unity of Heaven, Earth, and Humanity). Eastern environmental philosophy rejects conceptualizing humanity as an external master or conqueror of nature; instead, it positions humanity as an organic component within a unified, grand living organism of the cosmos (Callicott & Ames, 1989). Within this integrated framework, local community livelihoods and wetland preservation are no longer conceptualized as mutually exclusive forces. By protecting the foraging and nesting grounds of the Sarus Crane to sustain ecotourism, local residents actively participate in the cosmic process of *Sheng-sheng*—the continuous generation and nurturing of life (Palmer, 2001).

From the perspective of modern sustainable tourism theory, community-based co-management represents the optimal mechanism to balance development and conservation within sensitive ecosystems. The active engagement of indigenous residents, who possess extensive traditional ecological knowledge of the flooding seasons, softens rigid administrative enforcement by replacing it with a highly voluntary self-regulation mechanism (Pham et al., 2002). This synthesis transforms the local populace into organic guardians of the landscape, where they protect the Melaleuca forests and grasslands not due to external legislative imposition, but out of an awareness that the vitality of nature is bound to their own destiny. This synchronous operation ensures scientific precision in monitoring environmental degradation indices through community surveillance (Creswell & Creswell, 2018) while elevating ecological conservation at Tram Chim into an exemplary model of human-ecological harmony in an era of global environmental crisis.

6. CONCLUSION

This study has executed an interdisciplinary discursive trajectory, structurally synthesizing empirical environmental datasets from the Tram Chim Ramsar site with the eco-centric paradigm of Daoist philosophy to resolve the critical tension between economic expansion and biosphere preservation. The empirical findings demonstrate that contemporary anthropocentric tourism models applied across Vietnamese wetlands impose excessive mechanical payloads (*nhân vi*), severely fracturing the autonomous, self-generating order of the ecosystem. The irrational inflation of tourist volume and the unchecked expansion of motorized transport have not only driven the endangered Eastern Sarus Crane (*Grus antigone*) and endemic floral matrices into systematic decline, but have also compromised the holistic cosmic vital force (*Qi*) of this internationally protected biome (Nguyen et al., 2018). This socio-ecological crisis demands an urgent deconstruction of the dominant utilitarian paradigm, clearing paths for a more comprehensive and reverent environmental governance framework.

To structurally ameliorate these ecological overshoots, translating supreme Daoist metaphysical principles into operational technical instruments has demonstrated profound efficacy. The mathematical formulation of Real Carrying Capacity (RCC) functions as an objective boundary that materializes Laozi's eco-ethical construct of "Contentment" (*Zhi-zu*), enforcing necessary ecological stops within human agency (Bauer, 2014). Concurrently, operationalizing "Wu-wei Tourism" (Non-coercive Tourism) via the elimination of mechanical disturbances, replaced by quiet transportation and flood-adaptive infrastructures, safeguards the primordial existential space of non-human entities while elevating visitor experiences into a transformative ritual of mental healing, enabling individuals to shed the "dust of time" to dissolve into the cosmic flow of nature (Miller, 2017). Furthermore, the community-based co-management framework manifests the ultimate ontological state of *Tian-ren-he-yi* (Cosmic Unity), transforming buffer-zone residents from destructive extractive actors into organic guardians of the landscape, wherein human survival and wetland endurance exist in a symbiotic, mutually reinforcing relationship (Pham et al., 2002).

In conclusion, the paradigm shift observed at the Tram Chim Ramsar site reveals that the sustainability of sensitive wetland ecosystems cannot be achieved through superficial technical or administrative actions alone; rather, it requires a cognitive revolution regarding humanity's ethical obligations toward the non-human world. Daoist eco-ethics does not represent an antiquated philosophy but functions as a progressive vanguard, providing a solid ontological foundation to reconstruct contemporary ecotourism behaviors and governance strategies (Callicott & Ames, 1989). When human agency limits material desires, conforms to spontaneous cosmic laws (*Ziran*), and operates via non-coercive actions (*Wu-wei*), ecotourism transcends its consumptive essence to become a supreme act of ethical practice, fostering the restoration of global environmental spirituality (Palmer, 2001). This study envisions contributing a novel theoretical-practical matrix, advancing human-ecological harmony across internationally protected biomes amid the contemporary global biosphere crisis (Creswell & Creswell, 2018).

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