

International Models for Bee Tourism Development: A Strategic Roadmap for Peru

1. Strategic Introduction: A Bee Tourism Framework for Peru

Apiculture refers to the management of the western honey bee (*Apis mellifera*) for honey production, pollination services, and other hive products. In contrast, meliponiculture is the management of native stingless bees (tribe Meliponini), which produce distinct honey and other products while also providing important ecological and cultural benefits. Although both practices involve managed bees, they differ substantially in their biology, management, production systems, and historical development.

The growing public interest in beekeeping has created opportunities for bee tourism, an emerging branch of nature-based tourism centered on managed bees and their relationship with people and ecosystems. Bee tourism encompasses two related but distinct sectors: apitourism, which focuses on *Apis mellifera*, and meliponitourism, which focuses on native stingless bees. While both combine elements of ecotourism, agritourism, and environmental education, they offer different visitor experiences. Apitourism typically emphasizes honey production, commercial beekeeping, and pollination services, whereas meliponitourism often highlights native biodiversity, conservation, traditional ecological knowledge, and the unique biology of stingless bees.

An important distinction between these sectors is their suitability for tourism. Many *Apis mellifera* populations in South America have Africanized ancestry, resulting from the interbreeding of African-lineage and European honey bees. These colonies may respond more defensively and intensely to disturbances, making casual observation difficult without trained supervision, protective equipment, and careful visitor management. Stingless bees generally permit closer observation, but their tourism potential presents a different challenge. Their honey varies substantially among species, environments, and management systems (Rodríguez-Malaver et al., 2009). Meanwhile, formal standards, consumer familiarity, and accepted commercial products remain less developed. Therefore, *Apis mellifera* tourism requires stronger safety controls, whereas meliponitourism requires clearer product education and interpretation (Sustainable Metrics Peru Field Observations, 2026).

In Peru, both apiculture and meliponiculture occur across diverse rural landscapes, yet neither has developed into an organized, publicly accessible tourism sector. Project field observations suggest that visits to apiaries and meliponaries are generally arranged informally through researchers, institutions, or personal relationships rather than through established tourism routes, transportation networks, booking platforms, or coordinated visitor experiences. This disconnect between existing beekeeping activity and organized visitor access provides the foundation for the bee tourism framework proposed in this study.

Viewed through this framework, apitourism and meliponitourism represent opportunities to expand the value of beekeeping beyond the sale of honey and other hive products. They transform managed bee colonies into educational and recreational destinations that connect visitors with biodiversity, sustainable agriculture, ecosystem services, and rural livelihoods. A systems perspective recognizes honey as the most visible product while placing equal importance on pollination, ecosystem health, landscape resilience, local knowledge, and conservation. Properly developed, both apitourism and meliponitourism have the potential to strengthen environmental education, diversify household income, and encourage long-term stewardship of managed and natural ecosystems. The analysis below compares international models that may inform a coordinated pilot in Peru while recognizing that successful approaches must be adapted to local ecological, cultural, and economic conditions rather than copied directly.

2. Comparative Analysis: Transferable Global Mechanisms

International benchmarking helps identify specific mechanisms—provider standards, site readiness, destination integration, coordinated governance, and regional identity—that can turn an informal rural activity into a consistent, bookable tourism product. The five primary comparisons below are supplemented by Mexico and Brazil for native stingless-bee interpretation.

Country / region	Model component	Transferable mechanism
Slovenia	Quality designation and guide preparation	Tiered provider criteria and trained interpretation offer a model for pilot-scale host readiness and guide preparation (Kline Arih & Arih Korošec, 2015; Slovenian Tourist Board, n.d.)
Spain (Campomiel)	Site-level readiness	Published visits, tastings, workshops, facilities, and visitor information show how one operation becomes consistently bookable (“Experiencias,” 2026).
Greece (Halkidiki)	Destination integration	Bee paths and experiences are added to an established coastal or nature destination, using existing visitor flows rather than creating a stand-alone market (“Apitourism: An Alternative,” 2021).
Costa Rica	Coordinated sustainability mechanisms	Destination coordination, sustainability standards, rural-enterprise support, and monitored environmental finance provide mechanisms to adapt—not copy—for a Peru pilot (Rodríguez López, 2026; Instituto Costarricense de Turismo, 2025; Fondo Nacional de Financiamiento Forestal, 2025; Costa Rica, 2009).
Colombia	Shared agricultural identity	The Coffee Cultural Landscape is an analogous example of many producers and institutions organized around one regional agricultural identity (UNESCO World Heritage Centre, 2026).
Mexico and Brazil	Supplemental stingless-bee reference	Meliponiculture examples connect native bees with local knowledge, species-appropriate management, and forest-linked conservation (Lemelin, 2020; Drumond et al., 2024).

Across these cases, the strongest lesson is coordination rather than institutional scale. For Peru, the most transferable elements are lightweight provider-readiness tiers and guide preparation (Slovenia); published, visitor-ready experiences (Spain); integration with existing visitor flows (Greece); monitored sustainability and rural-enterprise mechanisms (Costa Rica); and a shared agricultural identity linking multiple producers and institutions (Colombia). Mexico and Brazil offer additional reference points for interpreting native stingless bees. These examples are inputs to a pilot design, not proof that the same results will occur in Peru.

3. Applying the International Lessons

Successful bee tourism development requires practical coordination to move from informal visits toward consistent, bookable experiences. Field observations and project sources suggest that authentic bee experiences exist, but scheduling, transportation, payment, safety, interpretation, and visitor readiness are not yet connected through a single operating system. For an initial Peru pilot, the structure should remain lightweight: one responsible operator, voluntarily enrolled hosts, shared readiness criteria, written agreements, and basic monitoring.

Certification and Standards

Rather than immediately creating a national certification system, a Peru pilot could adapt Slovenia's logic through simple provider-readiness tiers and prepared guides. Readiness could include safe access, suitable protective equipment, a prepared visitor area, hygienic tasting practices, clear activity limits, and a host who has agreed to the schedule and payment terms. Guides would connect technical apiculture with visitor engagement, explain colony behavior and regional biodiversity, and follow agreed safety procedures. Any later formal certification should depend on pilot evidence and institutional demand.

Payment Transparency and Oversight

Payment transparency is a practical design issue whenever hosts, operators, and a collective fund share revenue. The following safeguards are proposed for a pilot; they are not existing legal requirements:

- **Direct payments:** Pay host fees through documented transfers, digital wallets, or receipts.
- **Published allocation:** State how the visitor price is divided among the operator, hosts, and any reinvestment fund.
- **Independent oversight:** If a shared fund is created, include a credible external participant—such as a university or NGO—in review and reporting.

Agrochemical Education as a Supporting Theme

Peru regulates pesticide products through SENASA, but training and application practices can still vary. Bee tourism can help visitors and farmers understand how agrochemical exposure affects managed and wild pollinators (Doorn et al., 2024). This educational role complements, but does not replace agricultural regulation or technical training.

4. Strategic Integration: Leveraging the Cusco Pilot Hub

Cusco, Peru, demonstrates an established tourism, booking, and transportation network, giving it a practical advantage as the hub for a regional pilot. A multi-day bee tourism extension could connect existing visitor flows with the Sacred Valley, cloud-forest agriculture, and Amazon-facing areas. This is a proposed positioning strategy, not evidence of established demand.

Target Audience Data

PROMPERÚ 2024 data (PROMPERÚ, 2026) indicate that approximately 20% of foreign visitors participated in community tourism. Visitors in this segment stayed an average of 15 nights and spent US\$2,179, compared with 12 nights and US\$1,417 among foreign visitors overall—a difference of US\$762.

- **Specialized apiculture traveler:** Seeks technical demonstrations, comparative bee-system interpretation, and professional exchange.
- **Eco-adventure traveler:** Seeks community contact, biodiversity interpretation, and close observation of stingless-bee systems where host and colony conditions allow.

The Route: Cusco–Huayopata–Quillabamba

The pilot route spans a broad elevation range; field sites accessible through Cusco ranged from approximately 9,680 to 3,440 feet, allowing visitors to observe changing landscapes, crops, and bee-management systems. These should be presented as interpretive emphases rather than a strict highland/lowland division: both *Apis mellifera* and native stingless-bee systems may occur outside simplified elevation bands. In the Huayopata corridor, bee tourism could connect with coffee and cacao infrastructure, although cacao specifically is primarily pollinated by ceratopogonid midges, not bees (Arnold et al., 2019).

Potential Interpretive Emphases by Ecological Zone

- **Highland and cloud-forest sites (approximately 9,600–5,000 ft):** May emphasize *Apis mellifera* management, protective equipment, frame-hive practices, and links between forage and agriculture.
- **Amazon-facing and lower-elevation sites (approximately under 3,000 ft):** May emphasize meliponiculture, native bee diversity, and forest-linked knowledge. Where stingless-bee honey is presented, hosts should explain its variable moisture and species-specific properties (Rodríguez-Malaver et al., 2009).

5. Community Benefit and Financial Resilience

A Resilience Fund is one possible way to connect the Costa Rican lesson on monitored environmental finance with Peru's host-readiness needs (Rodríguez López, 2026; Instituto Costarricense de Turismo, 2025; Fondo Nacional de Financiamiento Forestal, 2025; Costa Rica, 2009). This is a proposed pilot mechanism, not a proven requirement. Such a fund could help address equipment, climate, theft, or access-to-credit risks for small producers.

Illustrative Host-Payment Formula

The original planning concept combines a base preparation payment, a per-visitor payment, and an activity bonus so hosts are compensated for time and preparation even when product sales are limited. The figures below are illustrative assumptions that require local validation:

- **Base preparation payment:** S/40 per visit.
- **Visitor payment:** S/10 per guest.
- **Activity bonus:** S/20 for a specific hive opening or specialized workshop.

Illustrative Fund Governance

A Peru pilot could dedicate a portion of tourism revenue into a shared fund for host readiness and route resilience. This adapts Costa Rica's broader lesson that environmental finance should have clear purposes, transparent oversight, and monitored use (Rodríguez López, 2026; Instituto Costarricense de Turismo, 2025; Fondo Nacional de Financiamiento Forestal, 2025; Costa Rica, 2009). Hosts, the route operator, and an independent institutional participant could jointly review funding for:

- **Host-readiness improvements:** Protective equipment, hive materials, sanitation, or visitor-access upgrades.
- **Emergency assistance:** Recovery from theft, fire, landslides, or other agreed disruptions.

Even with transparent governance, bee tourism should be treated as supplemental and potentially seasonal income rather than dependable income.

6. Implementation Matrix

The following matrix distinguishes what can be adopted directly, what requires local adaptation, and what should be avoided as the Peru pilot is tested.

ADOPT — proven operating practice	ADAPT — Peru context	AVOID — high-risk approach
Published, bookable information: Clearly state schedules, activities, facilities, access, and safety expectations.	Provider-readiness tiers and guide preparation: Apply Slovenia's logic at pilot scale before considering formal certification.	National bureaucracy before pilot evidence: Do not build a new certification institution before testing demand and system stability.
Destination integration: Use Cusco as the hub and connect bee experiences to established coffee, cacao, nature, lodging, and transport networks.	Shared regional identity: Adapt Colombia's multi-producer landscape logic to connect participating hosts under a clear Peruvian identity.	Mass-tourism groups: Use small groups and host-specific limits to protect colonies, hosts, and visitors.
Transparent host agreements: State payment terms, inclusions, responsibilities, and cancellation procedures in writing.	Monitored reinvestment: Test Costa Rica-inspired sustainability and environmental-finance mechanisms at modest pilot scale.	Medical health claims: Separate traditional uses from clinically supported evidence
Direct local purchasing: Give visitors clear, voluntary opportunities to buy authentic products from participating hosts.	Meliponiculture interpretation: Adapt Mexico and Brazil examples to Peru's species, knowledge, hive designs, and host capacity.	Independent driving: Mountain conditions favor operator-coordinated transportation for the proposed pilot.

Why This Matters: The Cusco roadmap is about more than just attracting more tourists; it is about testing whether coordinated, small-group bee experiences can generate supplemental rural income, strengthen visitors' understanding of biodiversity, and support improved host readiness. These outcomes are possible and dependent on operator quality, host participation, transparent payments, route testing, and continued ecological monitoring.

Jake Johnson

Creighton University

Dr. Carol Fassbinder-Orth

July 28, 2026

Source Bibliography

- Apitourism: An alternative, enjoyable and challenging activity for demanding citizens and tourists!* (2021). URBACT. <https://urbact.eu/articles/apitourism-alternative-enjoyable-and-challenging-activity-demanding-citizens-and-tourists>
- Arnold, S. E. J., Forbes, S. J., Hall, D. R., Farman, D. I., Bridgemohan, P., Spinelli, G. R., Bray, D. P., Perry, G. B., Grey, L., Belmain, S. R., & Stevenson, P. C. (2019). Floral odors and the interaction between pollinating ceratopogonid midges and cacao. *Journal of Chemical Ecology*, 45(10), 869–878. <https://doi.org/10.1007/s10886-019-01118-9>
- Costa Rica. (2009). Ley de fomento del turismo rural comunitario, Ley N.º 8724 del 17 de julio de 2009 (as amended by Ley N.º 10049 of November 15, 2021). *La Gaceta*, No. 191.
- Doorn, M. A., Verde-Jiménez, M., Vallejos-Farías, L., Heredia-Yacila, C., Abad-Pozo, V. R., & Olate-Olave, V. R. (2024). Comprehensive assessment of the health condition of managed honey bees potentially exposed to contamination with agrochemical residues. *Anais da Academia Brasileira de Ciências*, 96(Suppl. 3), e20231397. <https://doi.org/10.1590/0001-3765202420231397>
- Drumond, P. M., Carvalho-Zilse, G. A., Witter, S., Alves, R. M. de O., & Drummond, M. S. (Eds.). (2024). *Meliponicultura: O produtor pergunta, a Embrapa responde*. Embrapa Meio-Norte.
- Experiencias | Campomiel - Mieles*. (2026). Campomiel - Mieles. <https://www.campomiel.com/en/experiencias>
- Fondo Nacional de Financiamiento Forestal. (2025). *Pago de servicios ambientales*. <https://www.fonafifo.go.cr/es/servicios/pago-de-servicios-ambientales>
- Instituto Costarricense de Turismo. (2025). *Sostenibilidad turística CST*. <https://www.ict.go.cr/es/sostenibilidad/cst.html>
- Kline Arih, I., & Arih Korošec, T. (2015). Api-tourism: Transforming Slovenia's apicultural traditions into a unique travel experience. In *WIT Transactions on Ecology and the Environment* (Vol. 193, pp. 963–974). WIT Press. <https://doi.org/10.2495/SDP150811>
- Lemelin, R. H. (2020). Entomotourism and the stingless bees of Mexico. *Journal of Ecotourism*, 19(2), 168–175. <https://doi.org/10.1080/14724049.2019.1615074>
- PROMPERÚ. (2026). *Boletín: Perfil del turista extranjero que visita el Perú*. PROMPERÚ TurismoIn. <https://www.promperu.gob.pe/turismoIn/boletines/detalleboletin?boletin=296>
- Rodríguez López, W. (2026, May 7). *Informe final de gestión al frente del Instituto Costarricense de Turismo (Período constitucional 2022–2026)*. Instituto Costarricense de Turismo.

- Rodríguez-Malaver, A. J., Rasmussen, C., Gutiérrez, M. G., Gil, F., Nieves, B., & Vit, P. (2009). Properties of honey from ten species of Peruvian stingless bees. *Natural Product Communications*, 4(9), 1221–1226. <https://doi.org/10.1177/1934578X0900400913>
- Slovenian Tourist Board. (n.d.). *My way of following the bees: Apitourism in Slovenia*. Slovenian Tourist Board & Slovenian Beekeeper's Association. <https://www.slovenia.info>
- UNESCO World Heritage Centre. (2026). *Coffee Cultural Landscape of Colombia*. <https://whc.unesco.org/en/list/1121>