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Socioeconomic and Environmental Impact of Ayahuasca Retreat Centers in Costa Rica

Executive Summary

Based on research by Dr. Leiner Vargas Alfaro (CINPE, National University of Costa Rica) and Raquel Blanco (INEC), Costa Rica, 2024

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Study overview and methodology

For years, Costa Rica has attracted a constantly expanding wellness tourism sector, and within this sector, ayahuasca retreat centers are playing an increasingly prominent role in the country's tourism offerings. This report provides the first systematic assessment of their economic, social, and environmental impact — a pioneering effort, given that until now this segment of wellness tourism lacked consolidated data that would allow for an accurate assessment of its true magnitude.

The research combines quantitative and qualitative techniques. The core of the study consists of a survey — administered via the SurveyMonkey platform during the last quarter of 2023 — targeted at owners, managers, and staff at 32 of the approximately 60 centers that, according to the researchers' own estimates, are currently operating in the country. The questionnaire collects information on location, types of activities, employment, revenue and expenses, investment in infrastructure, tax contributions, environmental practices, community partnerships, and safety protocols for ceremonies.

The research team supplemented the survey with in-depth interviews with local government officials, community leaders, and experts in ayahuasca and ecotourism, as well as field visits and semi-structured interviews at four centers selected as case studies. This combination allows for the quantitative data to be contextualized within the challenges and opportunities as perceived by the stakeholders within the ecosystem themselves.

Costa Rica and wellness tourism: the macroeconomic framework

Tourism has been one of Costa Rica's main economic activities for three decades, and the country has quickly regained the ground lost during the pandemic. According to data from the Costa Rican Tourism Institute (ICT, 2023), air travel remains the dominant mode of entry and exit, with 90% of tourists entering and leaving the country by air. In June 2023 alone, 202,235 tourists arrived by air — 142,025 via Juan Santamaría International Airport and 60,177 via Daniel Oduber Airport — representing increases of 10.1% and 5.5%, respectively, compared to the same month in 2022. The cumulative total from January through June reached 1,338,303 tourists, 19.4% more than in the first half of 2022.

North America accounts for the majority of this influx: 977,783 tourists in the first half of 2023 (+21% compared to 2022), led by the United States (792,944), Canada (148,973), and Mexico (35,866). Europe contributed 225,617 tourists during the same period (+9.3%), with France (40,016), Germany (39,369), and the United Kingdom (37,006) as the main markets, followed by Spain (21,293), the Netherlands (14,280), and Switzerland (13,610). Average tourist spending remained stable at $1,470.3 per person in 2022, with stays ranging from 12 to 13 nights — among the longest in the region — and spending on tourism services ranging from $1,500 to $1,600.

Tourism employment, which suffered a 25% decline in 2020, recovered in 2022 to levels similar to those of 2019, with approximately 169,205 people employed. Within this context, health and wellness tourism — the category that includes ayahuasca retreat centers — now accounts for 10.9% of total tourism revenue and 0.6% of the national GDP, figures that position this segment as a small but increasingly significant niche within the country's economy.

Characteristics and geographic distribution of the centers

The centers surveyed are distributed unevenly throughout Costa Rica, with a notable concentration in Puntarenas (25% of the sample, 8 centers), followed by San José (12.5%, 4 centers), Alajuela and Guanacaste (9.4% each, 3 centers), Cartago (6.3%, 2 centers), and Heredia and Limón (3.1% each, 1 center). A striking finding: 31.3% of the centers — 10 out of 32 — did not disclose their precise location, a pattern that the researchers themselves link to the lack of clear regulations regarding the commercial use of ayahuasca in the country.

Most of these centers are located in rural areas near mountains, beaches, tropical forests, and national parks, and not all focus exclusively on working with the plant: a significant number combine ceremonies with yoga retreats, adventure tourism, and other wellness services, in a diversified business model that varies considerably from one center to another.

Impact on employment

Job creation is the most immediate and measurable social impact of these centers. The 32 centers surveyed collectively generate 518 jobs: 353 full-time and formal (68% of the total), 86 part-time or informal (17%), and 79 seasonal or temporary (15%). These jobs directly support more than 2,000 families.

Extrapolating this proportion to the estimated total of 60 centers, the number of families benefiting from direct employment would exceed 5,000. If we apply the indirect employment multiplier of 1.7—taken from Acuña and Ruiz (2000)—the total number of jobs supported by the entire ecosystem rises to more than 13,000. A large portion of these jobs is concentrated in rural areas outside the Central Valley, with a notable proportion of women; according to the report, this is particularly significant in regions where women's access to formal employment tends to be more limited.

The distribution of employment among facilities is markedly asymmetrical: while a single facility reports 100 jobs, several others operate with just one or two employees, reflecting an ecosystem where a small number of large operations coexist with a majority of small or family-run projects.

Revenue, sales, and contribution to GDP

The establishments surveyed generate an average monthly revenue of $1.2 million during the high season (November–April) and $37,500 during the low season (May–October), with annual sales totaling approximately $14.4 million in the sample. Extrapolating to the sector as a whole, the study estimates that its contribution to Costa Rica's GDP could range from $35 million to $40 million annually — a figure that, according to the Central Bank (2024), would be equivalent to about 20% of the value added by the coffee industry, one of the country's most economically established sectors.

Most of the businesses — micro and small enterprises — generate monthly revenues of between $10,000 and $50,000: during the off-season, 28.13% fall within that range, while 37.5% report revenues of less than $10,000. During the high season, more than 40% remain within the $10,000 to $50,000 monthly range. Only a small percentage—6.25% in each bracket—reports revenues between $50,000 and $100,000, and between $100,000 and $500,000, respectively. The study identifies at least three larger centers, one of which exceeds $1 million in monthly revenue, and estimates that about 15% of the ecosystem consists of medium-sized companies with a high local impact, while the rest is divided between micro and small businesses — the vast majority — and a small group of large operations.

Production structure, costs, and investment

Personnel account for 35% of the centers' expenses — the largest component of their cost structure — followed by investments in infrastructure and equipment (25%), supplies (16%), logistics (9%), promotion and marketing (8%), and other unspecified expenses (7%). Extrapolated to the ecosystem as a whole, annual spending on salaries would be between $3 million and $4 million, with additional payroll taxes and incentives amounting to another $2 million. Investment in infrastructure ranges from $40 million to $50 million, with a similar amount allocated to land acquisition and permits, while logistics, supplies, and promotion would total between $3 million and $4 million annually.

Regarding cumulative investment in infrastructure, 33.33% of the centers report having invested between one and three million dollars, and nearly 70% fall within the range of 100,000 dollars to three million. A small percentage has exceeded ten million dollars. Property purchases follow a similar pattern: 16.67% under $100,000, 30% between $100,000 and $500,000, 23.33% between $500,000 and $1 million, 26.67% between $1 million and $3 million, and 3.33% exceeding ten million. Many of these centers also feature restaurants or in-house kitchens, with packages that include transportation and meals for visitors.

Demand and visitor profile

The study estimates approximately 45,000 annual visitors for the sector as a whole — about 45% of all tourists who cite health and wellness tourism as the reason for their trip to Costa Rica — with a growth potential that researchers describe as very high. During peak season, 20% of the centers receive between 101 and 500 visitors per month, and only 6.67% exceed 500 visitors per month.

The demographic profile is concentrated among people aged 25 to 44—96.55% of the centers identify the 35-to-44 age group as the predominant one among their visitors — mostly from North America, followed by Europe, Australia, and, to a lesser extent, Latin America. A key finding for the tourism sector as a whole: a significant portion of these visitors extend their stay in the country beyond the duration of the center's program, generating additional spending on lodging, transportation, and other tourist activities.

Operating cost structure

The centers' operating expenses—electricity, water, telecommunications, external services, and personnel—generally show a moderate cost structure. Fifty percent of the centers spend between $101 and $500 per month on electricity, and 81.25% remain below $500; extrapolated to the sector as a whole, annual electricity spending would exceed half a million dollars. For water, 53.13% spend less than $100 per month, and 89.38% remain below $500, with a projected sector-wide expenditure of around $200,000 annually. For telecommunications, 65.63% spend between $101 and $500 per month, with an estimated sector-wide total of $400,000 per year.

External services and third-party logistics — transportation, guides, suppliers — account for monthly spending of less than $1,000 for half of the centers, and less than $5,000 for 84.38%; together with general logistics expenses, the entire sector allocates approximately $2 million annually to this category. Spending on local staff is concentrated at the lower end of the scale: 45.16% of centers spend less than $5,000 per month, and 71.77% remain below $10,000. Municipal expenses are similarly moderate — 87.50% of centers have low costs in this category — and the same is true for supplies and consumables, where 86.67% spend up to $5,000 per month.

Environmental sustainability and conservation

Environmental commitment is one of the study's most consistent findings. 96.88% of the centers surveyed report implementing sustainable or regenerative practices, 84.38% maintain active ecological restoration programs, and 73.33% state that they already have established expertise in these types of practices — while the remaining 26.67% acknowledge that they still need to develop it.

In terms of land conservation, each facility protects an average of 57.2 hectares, ranging from 0 to 810 hectares depending on the case. Most are located in habitats of high ecological value: montane tropical forest, lowland tropical forest, rainforest, and riparian and coastal zones. Extrapolating to the sector as a whole, the report estimates that some 5,000 hectares are under some form of conservation associated with the presence of these centers — an area comparable to that of Tenorio Volcano National Park, which covers about 5,100 hectares — suggesting a net positive contribution compared to the alternative use of that land for agricultural or livestock activities.

Sustainability challenges and mitigation strategies

Alongside these advances, the centers themselves identify specific challenges: a shortage of professionals specializing in sustainable practices, a lack of environmentally safe products, the absence of composting systems or wildlife shelters in some cases, difficulties managing plastics and ensuring water supply during the dry season, occasional conflicts with poaching, complex legal procedures for establishing protected areas, and limitations on human and financial resources—exacerbated, in certain cases, by operating in rented facilities under the management of third-party owners.

Among the negative environmental impacts that the respondents themselves recognize as potential risks are the use of conventional cleaning products, excessive water consumption, the accumulation of waste after events, construction that reduces space for vegetation, noise pollution from certain activities, and the displacement of natural habitats. As mitigation strategies, the centers propose — and in some cases already implement — eco-friendly cleaning products, education on responsible water use, the construction of private wells, recycling management, planting during the rainy season, noise reduction at events, permaculture, solar and LED energy, rainwater harvesting, sustainable construction, active protection of watersheds, composting of kitchen waste, and reforestation programs.

Institutional, community, and Indigenous partnerships

The centers maintain a variety of partnerships with their local communities: 38.10% collaborate with Indigenous communities, 19.05% with educational institutions (schools, high schools, universities), 16.67% with other local stakeholders, 14.29% with environmental organizations, and 11.90% with women's groups. These figures, the report notes, reflect a particular interest in cultural integration and respect for Indigenous communities, beyond the direct creation of jobs.

In the area of collaboration with Indigenous communities, the centers mention forms of support that include direct funding, educating visitors about the practices of these communities, establishing fair trade relationships, planting trees and creating food forests, participating in infrastructure projects, raising funds for direct donations, and providing financial support for the recovery of Indigenous territories.

Social impacts: contributions and tensions

Beyond employment, respondents highlight specific social contributions: collaboration on continuing education and scientific projects — including providing housing for researchers — direct support for local culture through spaces for community workshops, community health initiatives such as free clinics, participation in long-term reforestation projects, school sponsorships, discounts for local residents, support for beach cleanups and volunteer work, as well as training programs in bamboo construction, permaculture, and the organization of local farmers' markets.

The report does not shy away from the tensions also noted by respondents: concerns about noise, excessive water use, traffic, and road deterioration; the risk that these centers could create a "bubble" that segregates visitors from the local community, limiting interaction between the two groups; and potential disparities in access and compensation between those working in the retirement industry and those who do not. The study frames these risks as phenomena shared with other tourist enclaves — not unique to this sector — and presents them as part of a process of integration with local communities that, like any emerging activity, requires time and the mutual building of trust.

Safety protocols and regulatory framework

Costa Rica does not yet have a specific regulatory or administrative framework for these centers. Among the factors that, according to respondents, attract participants to a particular center are personal connections, the safety and familiarity of the environment, the location in pristine natural settings, reputation and word of mouth, the authenticity of the experience, and the quality of the facilitators.

Opinions are divided on whether the sector should be regulated: less than 20% of respondents openly oppose government regulation, while the majority favor self-regulatory approaches—such as a common safety protocol or a self-regulatory body for the sector—although some acknowledge the need for the government to eventually establish a legal framework that guarantees participants' safety.

In terms of specific protocols, the study documents a considerable level of preparedness: 96.55% of the centers have facilitators trained in plant knowledge; 93.10% conduct participant screening; 89.66% offer post-retreat reintegration support; 75.86% have first-aid supplies and both male and female support staff; 68.97% have an established emergency protocol; 65.52% train their staff in first aid, 55.17% conduct orientation and safety workshops, 44.83% have doctors or therapists on hand, and 24.14% have security guards. At all centers that serve plants, participants sign disclosure and informed consent agreements.

Future outlook and strategic recommendations

Based on its findings, the report proposes a series of courses of action to maximize the sector's positive impact: fostering collaboration between centers and local and national authorities to develop clear legal frameworks; establishing common standards for safety, ethics, and sustainability — including certification of facilitators — in collaboration with industry associations and regulatory bodies; strengthening emergency protocols in collaboration with local medical professionals; and promoting collaborative research, including the creation of a shared data repository among centers to support scientific understanding of the effects and impacts of these retreats.

In addition, there are recommendations to expand community participation — through local hiring and procurement, and contributions to infrastructure such as schools and health services — to deepen sustainable practices by investing in green infrastructure, renewable energy, and waste reduction programs, to strengthen partnerships with Indigenous communities by ensuring an equitable distribution of economic benefits, to expand environmental education and awareness programs, and to promote responsible tourism that minimizes ecological impact and maximizes inclusion and equity for the most vulnerable communities.

The report itself notes that Costa Rica could, in principle, increase its installed capacity in this sector fivefold, given the country's logistical conditions and the existing ecosystem — a growth potential that, according to the researchers, would simultaneously benefit rural employment, the added value of tourism, environmental sustainability, and the well-being of those participating in these experiences.

Conclusion

> The study describes a sector that is still young but already economically significant for Costa Rica's rural areas, with a largely positive environmental footprint, actively developing community ties, and a high standard of safety that contrasts with the absence of a dedicated regulatory framework. In this initial snapshot of the ecosystem, ayahuasca retreat centers emerge as actors with the potential to establish themselves within Costa Rican wellness tourism — provided that the sector's growth is accompanied by shared standards, equitable partnerships with indigenous and local communities, and environmental management that sustains the results already observed over time.

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