Migration Letters

Volume: 21, No: S3 (2024), pp. 404-426

ISSN: 1741-8984 (Print) ISSN: 1741-8992 (Online)

www.migrationletters.com

Scientific And Sustainable Tourism: Comprehensive Experience At SKIS

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Abstract

This study seeks to promote Scientific Tourism (ST) at the Sumak Kawsay In Situ Research Center (SKIS) located in the Province of Pastaza, especially in the Mera canton. To address the lack of background on the topic at the study site, the research adopts a qualitative exploratory approach. A documentary design is implemented that involves an exhaustive review of bibliographic and technical documents related to Scientific Tourism. This work is structured as a case study, based on the analysis of a case of scientific tourism that has been successful in the past.

The Sumak Kawsay[1] In Situ Research Center (SKIS) houses a total of 19 tourist attractions, which are divided between cultural (47%) and natural (53%) elements. When carrying out an evaluation of their scientific potential, it is observed that 63% of these attractions have a low potential, 27% exhibit a medium potential, 5% show a high potential and another 5% have a minimum scientific potential. In addition, 19 tourist activities have been identified that encompass land, aquatic, aerial experiences, as well as tangible and intangible cultural activities.

Using the information collected, a proposal for a tourism product aimed at Cultural Tourism with a Scientific Dimension is presented. This initiative has been developed in close collaboration with the general coordinator of the Sumak Kawsay In Situ Research Center (SKIS). The main objective of this product is to take full advantage of the attractions and scientific potential that SKIS has, providing visitors with a unique and educational tourist experience.

Keywords: Tourism, Scientific, Cultural, Research, SKIS.

INTRODUCTION

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Tourism worldwide has undergone a significant evolution, becoming one of the most diversified economic sectors with outstanding economic expansion, according to (Nieto, Román, Bonillo & Paulova, 2016). The World Tourism Organization (UNWTO) reports that international tourist arrivals increased by 5% in 2018, reaching 1.4 billion, and tourism export revenues amounted to US$1.7 trillion (+4%), consolidating tourism as a global locomotive of economic growth and development.

Nonetheless, the COVID-19 pandemic has had a significant impact, with a 22% drop in international tourist arrivals in the first quarter of 2020, and an annual decline of 60% to 80% is projected compared to 2019 (UNWTO, 2020). In Ecuador, tourism represents the third largest source of non-oil revenue, contributing 2,288 million dollars in 2019, equivalent to 2.2% of GDP (MINTUR, 2019).

This study focuses on Cultural Tourism (CT) at the Sumak Kawsay In Situ Research Center (SKIS) in Ecuador, inspired by a Chilean model in Patagonia. Revelo (2017) highlights Ecuador's natural and cultural wealth, with around 40 biological and scientific stations, many related to tourism activity. The TC proposed in SKIS is based on four ways that seek to integrate tourism activity in a technical and organized way, offering tourists experiences focused on personal and academic development, beyond mere entertainment.

The present research tackles unexplored terrain in the study area by immersing itself in the fascinating world of scientific tourism. With a qualitative exploratory approach, this research ventures into the search for understanding and knowledge in a context that lacks documented antecedents. The documentary design adopted is based on a meticulous literature review, with the purpose of establishing a solid foundation and proposing an innovative product based on the lessons learned from successful scientific tourism in SKIS. This approach not only aims to fill the local information gap, but also to adapt proven strategies to the particularities of our region. In addition, in-depth interviews are incorporated as a fundamental tool, aimed at capturing essential voices and enriching the understanding of this evolving phenomenon. Through this research, we seek not only to explore, but also to contribute to the development of authentic and sustainable scientific tourism in our community.

The research of the "Patagonian Archipelagos Project, International Destination, for Scientific Tourism," led by the Center for Economic and Budgetary Research (CIEP) and financed by the Multilateral Investment Fund (IDB-MIF), the Identification of the forms of Scientific Tourism (TC) that are developed in SKIS. The analysis, based on Mao and Bourlon's classification (2011), reveals four distinctive forms of CT: Exploration and Adventure Tourism with a Scientific Dimension, Cultural Tourism with a Scientific Dimension, Scientific Eco-Volunteering, and Scientific Research Tourism. These forms are differentiated by the dimensions of "Exploration and Adventure," "Scientific Research," "Education and Learning," or "Culture and Interpretation."

With clear purposes, the product seeks to exploit the activities and attractions available, arouse the interest of a wider audience by highlighting its dual focus on learning and on the protection and preservation of nature and culture, and establish SKIS as a relevant attraction presenting tourism as a sustainable and sustainable option. With a focus on ecotourism, a tourism package has been created that includes natural and cultural activities with a scientific and educational orientation. The "Jungle and In Situ Connection" package offers a two-day, two-night experience that involves transportation, food, specialized guidance, lodging and various enriching activities.

METHODS

The Sumak Kawsay In Situ Research Center (SKIS) is located in the Mera canton of Pastaza Province, 35 km northwest of the center of Puyo. It extends over 95 ha with altitudes between 1295 and 1457 meters above sea level. The coordinates are 01°24.07' South Latitude and 078°04.00' West Longitude. The climate ranges from 16°C to 23°C, with an annual rainfall of 5,000 to 6,000 mm, and humidity of 75% to 100%. The life zone includes tropical humid forest, humid forest and eastern low montane forest.

The research is positioned in a qualitative exploratory approach, given the absence of antecedents in the study area, seeking to deepen the understanding of scientific tourism. A documentary design is used that involves an exhaustive literature review to contextualize the topic and propose a product inspired by the success of science tourism in SKIS. The choice of this approach seeks not only to fill the local information gap but also to adapt successful practices to a specific context. In addition, in-depth interviews are incorporated to capture key perspectives and enrich the understanding of the phenomenon, ensuring a holistic and contextualized view of scientific tourism in the study region.

This section details the research methodology, divided into three Specific Objectives (SO):

- Specific Objective 1 (SO 1): To examine the scientific potential and tourism activities in SKIS, through the Literature Review: Analysis of SKIS technical documents. Interviews: With SKIS administrators and officials. Assessment of scientific potential: For the assessment of scientific potential, the matrix for the assessment of scientific potential proposed by (Silva, 2018) was used, as well as the numerical evaluation scale proposed by (Sandoval, 2006). Systematization of information: Data processing.

- Specific Objective 2 (SO2): To identify the forms of Scientific Tourism in SKIS: Literature review: Study of forms of CT. Description and rating of features: Comparison and rating of features in tables. Comparison Chart: A table to compare general characteristics of each form of CT. Compliance assessment: Assignment of values and summation. Analysis of results: Identification of the form of CT with the highest summation.

- Specific Objective 3 (SO3): To propose a tourism product for an identified form of CT: Supply and demand analysis: Study based on (Silva, 2018). Tourism product design: Use of the methodology of (Mao, 2015). Practical information about the product: Duration, number of visitors, recommendations, price and contact. Socialization of the product: Presentation to the general coordinator of SKIS.

The methodology applied guarantees the achievement of the objectives set out in the research on Scientific Tourism in SKIS.

RESULTS

Results of **Specific Objective 1 (SO 1):** To examine the scientific potential and tourism activities in SKIS.

SKIS Overview: The Sumak Kawsay In Situ Scientific Research Center (SKIS) is located in the buffer zone of Llanganates National Park and is part of the Llanganates-Sangay Ecological Corridor. It appeared on the tourist map of the province of Pastaza approximately 15 years ago

and in 2019 it was legally recognized as the "Sumak Kawsay Foundation In situ" by the Ministry of the Environment (MAE), with the purpose of creating and executing environmental development programs with a social focus. The foundation covers 95 hectares, initially acquired as family patrimony for livestock and agriculture, specifically the production of naranjilla. Of these, 4 hectares (4.2%) are used for infrastructure, permaculture and fish farming, while 79 hectares (82.3%) are primary forest and 13 hectares (13.5%) are secondary forest. Research and tourist activities are carried out on all hectares without restrictions. The project is structured for a duration of 300 years, and the sale or lease of inherited property is prohibited, allowing only activities related to research and conservation.

Basic services and infrastructure: The main building at **SKIS**, three stories and built with wood, dirt floor and zinc roof, stands out for its open sides that allow camping in tents and hammocks on the upper levels. Equipped with three multi-purpose rooms for tourists, researchers, and volunteers, the lower level houses a dining room, hands-on workshops, laundry, wine cellar, and general workspace. Despite lacking basic services, the use of natural resources such as rainwater and sunlight is efficiently managed, complemented by a motor power plant and diesel lighters. Additionally, SKIS has the Field Laboratory and "Refuge", built with wood and zinc, offering spaces for practical courses, sample treatment, scientific interpretation, library and a platform for meditation and yoga. Outside, there is a volleyball court that also serves as a camping area, a courtyard with wooden benches for panoramic views and a temporary helipad for emergencies.

Environmental characteristics: SKIS, located in the canton of Mera, Province of Pastaza, Ecuador, is located in the foothills of the Amazon and the Andes. According to the report by (SKIS, 2019), this region is home to a unique combination of highland and lowland ecosystems, with rich biodiversity supported by a peculiar geology of limestone and petrified seashells. Although mostly remote and unexplored, this region is considered to be the most biodiverse on the planet, with numerous species yet to be discovered. SKIS covers 0.95 square kilometers of humid tropical forest, eastern humid forest and montane forest, with an annual rainfall of 5,000 to 6,000 mm, an average humidity of 75% to 100%, and temperatures ranging from 16 to 23 °C. In 2018, a team of researchers conducted an ecological study in the upper Anzu River area, recording 32 water springs along 3600 meters of transects, with an average of one water source every 112.5 meters. (Bentley et al., 2018).

Biological diversity (flora and fauna)

SKIS Flora: According to the Scientific Report of the Sumak Kawsay In Situ Environmental Training Center, (Larson, 2019), Neill (Plot 1) 2019, and Neill (Plot 1) cited by (SKIS, 2019) report on the existence of two botanical plots of 25 hectares each in Sumak Kawsay In Situ, where 105 genera belonging to 46 families and 145 species have been identified. Jost, mentioned by (SKIS, 2019), highlights the rediscovery of the plant Monopyle paniculata after being lost for 150 years in the surroundings of the Anzu River, and also points out the tree species Meriania pastazana, endemic to Mera. In the field of orchids, during the last 15 years, more than 60 new species have been discovered in the corridor between Llanganates and Sangay (Simpson et al., 2013; Arias-Gutiérrez et al., 2016). In addition, in an area designated as a "natural medicine cabinet" with medicinal plants, they are available for staff, volunteers, visitors and researchers, highlighting some such as dragon's blood (Croton lechleri), nettle (poison ivy), verbena (Verbena officinalis), guayusa (Ilex guayusa), coca (Erythroxylum coca), herb luisa (Cymbopogon citratus), saragoza, (Aristolochia trilobata l), yanten (Plantago lanceolata), cinnamon (Cinnamomun verum) among others. Organic edible plants include: cassava (Manihot esculenta), banana (Musa paradisiaca), corn (Zea mays), chili pepper

(Capsicum annuum), sweet potato (Ipomoea batatas), potato (Solanom tuberosum), coffee (Coffea), etc.

Table 1. Fauna recorded in the upper area of the Anzu River.

Class	**Total, species**	**Remarks**
Amphibians	72	Seven unidentified species believe they could be new species to science
Reptiles	60	Four species of reptiles are endemic
Mammals	28	The Puma (Puma concolor), Tigrillo (Leopardus pardalis), and the Jaguar (Panthera Onca) have been recorded with camera traps
Poultry	143	Group Registration (GMAE) until 2019
Macroinvertebrates	41	Samples of seven Broken and 10 caverns

Note: The data presented in this table are from records in both SKIS and the upper Anzu River, through SKIS researchers and independent researchers. Taken from "Scientific Report Raised at the Sumak Kawsay In Situ Environmental Training Center," from SKIS, 2019.

Projects and programs at SKIS: SKIS, an organization focused on research, ecotourism, and ornithology, started with small, incremental projects, some of which were led by independent researchers. Although SKIS provided the space for these investigations, its involvement was primarily as a provider. The camera trap project marked the first effort organized and led by SKIS in collaboration with the Ecominga Foundation. Since 2019, the organization has implemented new projects involving volunteers and tourists, addressing conservation, environmental education, research, and scientific tourism. For a better understanding, the projects have been categorized into projects in development, standalone projects, and future projects. These project groups are detailed below.

In the Projects in **Development** category, SKIS engages with volunteers and tourists interested in specific areas of research. The Herpetology project focuses on the study of reptiles and amphibians, using transepts in different habitats to analyze distribution, habitat selection, and activities. Researchers have identified cases of hybridism in snakes and discovered new species of frogs. Underground Ecology examines ecosystems in caves, with participatory activities to assess biodiversity, revealing data on water quality and the presence of unknown species. The Camera Trap project seeks to identify mammals in the territory, revealing an active feline corridor with four registered species. In the category **of Independent Projects**, SKIS provides facilities for projects such as Botanical Plots, which study the diversity of flora, and Ornithology, which records the biodiversity of avifauna in collaboration with the Bird Monitoring Group of the Ecuadorian Amazon. These independent projects have the collaboration of experts and students, using the facilities and technical support of SKIS for the collection of data and samples.

At SKIS, new projects have been established with **a focus on volunteers**, who can participate in various activities, such as internships, scientific studies, degree projects or simply learn about flora, fauna, ecological constructions, ornithology, herpetology , among others. Volunteers, with no specific requirements, can choose from programs such as Herpetology, Underground

Ecology, Camera Traps, Ornithology, Ecological Constructions, Cave Ecology, Permaculture and Sustainable Agriculture, and Forest Ecology. In addition, there are activities related to the maintenance of the physical space, such as Trail Construction and Maintenance, Field Lab Maintenance, Ecological Art, and more. Volunteers contribute academic papers or green buildings and must pay $20 a day to cover expenses. In addition, SKIS has conducted more than 40 investigations, some published, some in process, and some unpublished, addressing varied topics in the natural sciences and conservation in the Amazon region of Ecuador.

Administrative management: Although the Centre does not have its own board of directors, it is governed by the board of directors of the SKIS Foundation, which is made up of a **president, vice-president, secretary, treasurer, general coordinator and coordinator of research and volunteering**. The duties of the president include convening meetings, presiding over assemblies and signing minutes, while the vice president deputizes for the president in his absence and takes office in the event of a vacancy. The secretary draws up minutes, makes summonses, keeps records and keeps documents. The treasurer oversees accounts, presents budgets and balance sheets, holds funds, makes payments, and keeps accounting records. The general coordinator is in charge of projects that require coordination, while the research and volunteering coordinator plans scientific and volunteering activities at SKIS.

Agreements between the SKIS Foundation and other institutions: SKIS has started its journey towards conservation and research independently, receiving limited support from government entities such as the provincial GAD and the cantonal GAD, which contribute mainly to the maintenance of the road, signage and campaigns at fairs. Despite this, SKIS has established agreements with various national and international universities, such as the **Amazon State University, UTLA, SPAM and ESPOJ.** In addition, it collaborates with international schools, such as **Community School, Ferrum College, and Roanoke College,** through tourist connections and volunteer programs during the summer. It is also backed by companies and support groups, such as the **YACO Canyoning Caving Club and the International Group of Tactical Operators**, which provide support in extreme sports and emergencies. Hayawaska Tours and Shiran Nantu are key partners that sell and promote tour packages developed by SKIS. In addition, it participates in exchanges with the International Association of Students in **Agriculture and Related Sciences (IAAS) and** has an agreement with **KOIKA** for the exchange of volunteers in research on soil, plants, wildlife, adventure tourism and native crops.

Table 2. Sumak Kawsay In Situ Tourist Attractions

Category	Guy	Subtype	Attractiveness Name
Natural Attractions	Mountains	Low mountain	Amazon Viewpoint Alto Anzu Viewpoint
	Lake environments	Lagoon	The Lagoon
		Poses	White clay pose
	Rivers	River	Anzu River Monkey River
		Creek	Quebrada Landslide
		Waterfall	Waterfall Sanctuary
	Forests	Low Montane	Primary Forest Secondary Forest

Cultural Attractions	Architecture	Other Architectural Infrastructures	SKIS Station
	Technical and scientific achievements	Engineering Works	SKIS Lab Construction Program Ecological
		Flora and Fauna Exhibition Center	Herpetology Program Underground Ecology Program Camera Trap Program Botanical Plot Program Food Parcel Program Ornithology Program

Adapted from the information mentioned by the general coordinator of SKIS.

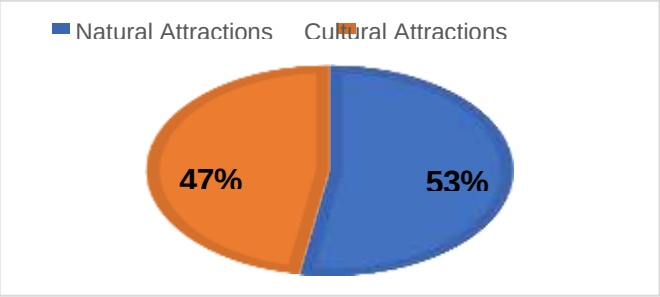

Figure 1. Categories of SKIS tourist attractions

Figure 1 reveals that the vast majority of tourist attractions on SKIS belong to the "natural attractions" category, accounting for 53%. Within this category, "rivers" are the most prominent elements, highlighting the abundance of water resources in SKIS due to their geographical location and the conservation status of their forests. On the other hand, the minority, but no less significant, corresponds to the category "cultural attractions" with 47%. Within this category, the type "technical and scientific achievements" and the subtype "flora and fauna exhibition center" are the ones that cover a greater number of tourist attractions, indicating a rich diversity of flora and fauna, as well as educational and interactive activities for visitors in this territory.

Sumak Kawsay In Situ (SKIS) is home to a variety of tourist attractions that encompass both nature and cultural aspects. Among them, the following stand out: **Amazon Viewpoint** with its panoramic view of the jungle, an amphitheater and extreme swing; the **Alto Anzu Viewpoint** with views of the Cordillera Oriental and the Corridor of the Felines; **The Lagoon** that offers monitoring of amphibians and nocturnal fauna; the **White Clay Pool** for therapeutic and craft activities; the Anzu River with crystal clear waters, diversity of flora and fauna, and camping and landscape photography options; the **Monkey River** with various water activities and the **Waterfall of the Monkeys**; the **Quebrada Derrumbe** for rappelling and inside the feline corridor; the **El Santuario Waterfall** for descent, photography and snorkeling; biodiversity-rich primary and secondary forests; the SKIS Station, which provides facilities for volunteers and tourists; the SKIS Laboratory with spaces for social and scientific activities; **Scientific and Food Study Plot Programs** organic, herpetology, underground ecology, camera traps, ornithology, Green Buildingsamong others. These programs focus on research and conservation, providing unique experiences to visitors, volunteers, and scientists.

Attractiveness Name	Actors' attitude	Interpretive	Economic viability	Attraction	Existence of Academic/Research Networks	Scientific dissemination	Scientific infrastructure and equipment	Link	Representa- tivity	Pedagogical value		assessment
NATURAL ATTRACTIONS												
1. Alto Anzu Viewpoint	2	1	1	2	0	0	1	1	0	1	11	Low potential
2. Amazon Viewpoint	2	1	1	2	0	0	1	1	0	1	11	Low potential
3. The Lagoon	2	2	1	2	0	0	0	1	0	2	12	Low potential
4. White Clay Pool	1	0	0	2	0	0	0	0	0	0		Doesn't reach minimum potential
5. Anzu River	2	3	0	2	0	0	0	2	1	1	13	Low potential
6. Monkey River	2	3	0	2	0	0	0	2	1	1	13	Low potential
7. Collapse Ravine	1	2	1	2	0	0	0	2	0	0	10	Low potential
8. Waterfall Sanctuary	1	2	1	3	0	0	0	2	0	0	11	Low potential
9. Primary Forest	3	3	3	2	3	3	2	3	2	3	29	High Potential
10. Secondary Forest	2	2	1	2	3	3	2	3	2	3	26	Medium Potential
CULTURAL ATTRACTIONS												
1. SKIS Station	0	2	0	2	0	0	2	2	0	0		Low potential
2. SKIS Lab	2	2	1	2	0	0	2	3	0	3	17	Low potential
3. Herpetology Program	3	3	2	2	3	3	2	3	2	3	28	Medium Potential
4. Underground Ecology Program	2	3	0	2	3	3	1	3	0	1	20	Medium Potential
5. Camera Trap Program	3	3	1	3	2	1	2	3	0	1	21	Medium Potential
6. Botanical Plots Program	3	1	3	1	3	3	2	3	1	3	25	Medium Potential
7. Food Parcel Program	1	1	0	1	0	0	2	0	2	1		Low potential
8. Ornithology Program	2	2	0	2	1	1	2	2	0	1	15	Low potential
9. Green Building Program	0	2	0	2	0	0	2	2	1	1	12	Low potential

Table 3. Assessing the potential of SKIS attractions

Adapted from "Natural and Cultural Heritage of the CIPCA for the development of scientific tourism, as a reference in the Amazonian university context," by M. P. Silva, 2018, p.33. graduate thesis from the Amazon State University.

According to Table Four, in Sumak Kawsay In Situ (SKIS), the Primary Forest stands out with a high scientific potential, followed by the Secondary Forest with a medium potential. However, seven Natural Attractions have low potential and one shows minimal scientific potential. Among the Cultural Attractions, the herpetology, underground ecology, camera trap and botanical plots programs have a medium scientific potential, while four others have a low rating in terms of their scientific potential. These evaluations were carried out considering the results of objective one, direct observations in 2019, the assessment of scientific potential (Silva, 2018) and the numerical evaluation scale of (Sandoval, 2006), reviewed by the SKIS Research Coordinator.

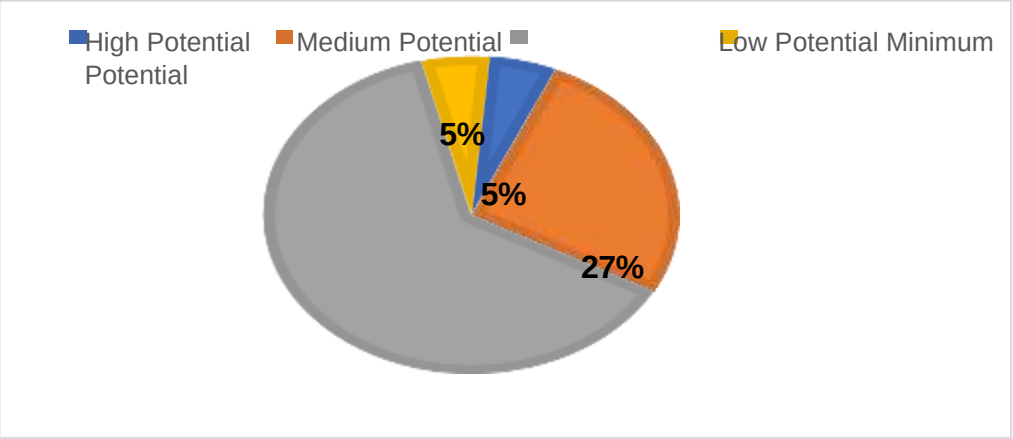

Figure 2. Scientific potential of SKIS tourist attractions

Most of the tourist attractions on SKIS, representing 63%, have a low scientific potential, while 27% have a medium potential. Only 5% have a high scientific potential, and another 5% have minimal potential from a scientific point of view.

Tourism activities of SKIS: In SKIS, several tourism activities have been identified that are aligned with the guidelines of the Manual of Tourist Attractions of the (MINTUR, 2018). These activities are linked to adventure tourism for natural attractions and consider tangible and intangible characteristics for cultural attractions. It is important to note that the activities on SKIS are free choice for tourists and are not limited to specific packages, and can be included according to the preferences of the visitors.

Table 4. In-water activities that can be done on SKIS

Natural Attractions				
On the water				
a). Diving ☐	b). Sea Kayaking ☐	c). Lake kayak ☐	d). River Kayaking ☐	e). Surfing ☐
f). Kite surfing ☐	g). Rafting ☐	h). Snorkeling ☐	i). Tubing ■	j). Regatta ☐
k) Panga Ride ☐	i). Boat ride ☐	m). Boat ride ☐	n). Jet ski ride ☐	o). Parasailing ☐
p). Water skiing ☐	q). Floating Banana ☐	r). Buoy ☐	s). Sports Dumbbell ■	Other ■ -Swimming -Hydromassage
Remarks:				

Taken from "Manual of Tourist Attractions," by MINTUR, 2018, p.79.

At SKIS, various activities are carried out around its aquatic attractions, such as the Anzu River and the Monkey River. These include **tubing**, a 50 to 60 meter buoy tour (or up to 200 meters

in the flood season), sport fishing in the rivers or pools, swimming in various places such as the Anzu River and the Waterfall Sanctuary, and a natural whirlpool offered by the waterfall at the Waterfall of the Monkeys. These activities can be enjoyed as part of the tour packages offered by SKIS, with the visitor choosing to bring their own equipment or use that provided by the centre.

Table 5. Airborne activities that can be done on SKIS

In the air			
☐ a). Hang gliders	☐ b). Canopy	☐ c). Paragliding	■ d). Other Swing
Observations: In two viewpoints within the reserve you can do swing activities.			

Taken from "Manual of Tourist Attractions," by (MINTUR, 2018, p.82).

At SKIS, the swing activity is offered, located in the Amazon Viewpoint with a height of approximately 15 meters and a flight of about 20 meters. The activity has adequate safety measures, including three harnesses, metal cables and ropes in perfect condition, backed by a qualified team.

Table 6. Activities on the Earth's Surface That Can Be Done on SKIS

On the Earth's Surface		
☐ a). Mountaineering	☐ b). Escalation	■ c). Hiking
☐ d). Cycle touring	☐ e). Canyoning	☐ f).Exploration of caves
☐ g). Activities Creative	☐ h). Horseback riding	■ i). Hike
■ j). Camping	■ k). Picnic	■ l). Observation of flora and wildlife
■ m). Observation of Stars	■ n). Other: Environmental education. Rappelling, canyoning	

Taken from "Manual of Tourist Attractions," by MINTUR, 2018, p.83.

At SKIS, land-based activities include hiking, hiking, camping, picnicking, flora and fauna watching, stargazing, environmental education, rappelling, and canyoning. Hiking and hiking are done on the 11 existing trails, with the need for boots and other accessories. Camping and picnic depend on the visitor's preference and the necessary equipment is provided. The observation of flora and fauna covers the entire territory, guided by biologists. Stargazing is offered with telescopes and binoculars. Environmental education is integrated into all packages to encourage connection with nature. Rappelling and canyoning are practiced on the Los Monos waterfall and the Santuario waterfall, respectively, with equipment provided and in collaboration with the YACO canyoning caving club.

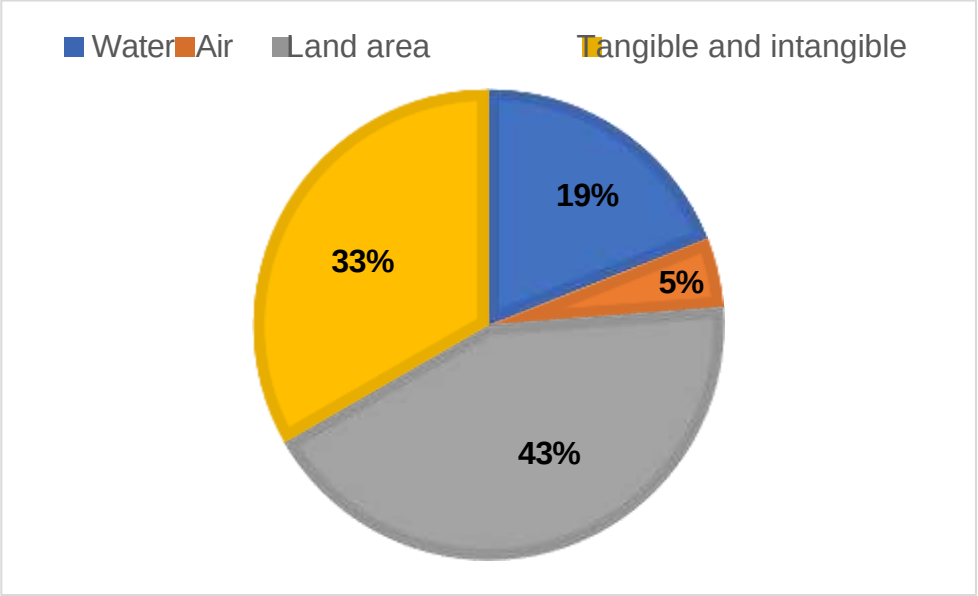

Figure 3. Activities that take place on SKIS

In SKIS, the activities are distributed as follows: 19% take place in the water, 5% in the air, 43% on the land surface, and 33% correspond to tangible and intangible activities of a cultural nature.

Results of **Specific Objective 2 (SO2):** Identification of forms of CT that are developed in SKIS

The analysis of the forms of Scientific Tourism (CT) carried out within the framework of the "Patagonian Archipelagos, International Destination Project for Scientific Tourism" led by the Center for Economic and Budgetary Research (CIEP) and financed by the Multilateral Investment Fund (IDB-MIF) is based on the classification of (Mao and Bourlon, 2011). These forms include: 1) Exploration and adventure tourism with a scientific dimension, 2) Cultural tourism with a scientific dimension, 3) Scientific Eco-Volunteering and 4) Scientific research tourism, differentiated by the dimensions of "Exploration and adventure", "Scientific research", "Education and learning", or "Culture and interpretation". The participation of the tourist varies in the construction of the product/project/stay, being more direct in exploration and research tourism. The importance of science in these activities is highlighted, being essential for research and eco-volunteering, while in cultural and adventure tourism it has an inferior character. In addition, the forms of CT can be complementary and interdependent in the same destination, generating greater complexity by joining several of them. Figure eight presents a detailed overview of the spheres and forms of scientific tourism, showing nine sub-forms organized into four elements: Scope of Science Tourism, Spheres and Forms of Science Tourism, Sub-forms of Science Tourism, and Type of Actor Participation.

Table 7. Characteristics of Forms of Scientific Tourism

No	General Characteristics	FORMS OF SCIENTIFIC TOURISM			
		Exploration and adventure tourism with a scientific dimension	**Cultural tourism with a scientific dimension**	**Scientific eco-volunteering**	**Scientific Research Tourism**
1	**Participation of the actor (tourist) in the construction of the product/project/ stay**	Strong/Direct	Weak/Indirect	Weak/Indirect	Strong/Direct
2	**Scientific dimension of the product and/or stay**	Weak/Peripheral	Weak/Peripheral	Strong/Central	Strong/Central
3	**Motivation for the trip**	Adventure, exploration, discovery.	Desire to strengthen personal and professional development through intercultural experiences	Participate in the protection and enhancement of species and natural habitats. Contributing to the advancement of science.	Produce scientific publications on a specific topic of interest, and educational materials.
4	**Activities that can be carried out by tourists**	Sports, Exploration & Science	Enjoy, understand, and get to know the culture, with a scientific approach.	Data collection, interpretation and information, construction and development of scientific research activity.	Learning, Experimentation, Discovery.
5	**Facilities you use**	Transportation, lodging, guidance, food, and sports equipment.	Specialized field guides, transportation, lodging and food, and technical	Existing Projects, Transportation, Lodging, Guidance, Food, Field Guides	Transportation, lodging, guiding, food. scientific research team.

			tools		
6	**Sub-Forms That Compose It**	1. Scientific Explorations. 2. Cultural and sports explorations. 3. Ecotourism with a Scientific Dimension. 4. Scientific Research. 5. Scientific Sports Explorations. 6. The Integral Scientific Tourism Trip	1. Educational and Cultural Trips. 2. Cultural and Sports Explorations. 3. Ecotourism with a Scientific Dimension. 4. Scientific Sports Explorations. 5. Educational & Learning Trips & 6. The Integral Scientific Tourism Trip	1. Educational and Cultural Trips. 2. Scientific Ecovolunteering. 3. Ecotourism with a Scientific Dimension. 4. Scientific research. 5. Educational & Learning Trips. 6. Comprehensive Scientific Tourism Trip.	1. Scientific Exploration. 2. Scientific Eco-Volunteering. 3. Scientific Research. 4. Sports Explorations 5. Educational & Learning Trips. 6. The Integral Scientific Tourism Trip
7	**Relationship with other types of tourism**	Sports, adventure or exploration tourism, scientific research tourism, nature tourism, recreational tourism, wellness tourism.	Community tourism, ethnotourism, urban tourism, rural tourism, agrotourism, ecological tourism or ecotourism, heritage tourism, religious tourism,	Scientific research tourism, educational tourism, ecotourism, solidarity tourism, sustainable tourism.	Ecotourism, business tourism, educational tourism, ethnographic tourism, ecotourism, solidarity tourism, sustainable tourism, responsible tourism.
8	**Audience/Participants**	Adventurers, explorers and sportsmen	This form can include any traveler	Volunteers, naturalists, students.	Professors, researchers, students.

			with an interest in culture, students, teachers, etc.		

Table nine presents the distinctive characteristics of each form of Science Tourism (CT), addressing several key elements. First of all, the "Participation of the actor" (tourist, user) in the construction of the product/project/stay is highlighted, highlighting the importance of the actor himself contributing to the development of the product. The "Scientific dimension of the product and/or stay" is essential, requiring that the activity be linked to science in its design and development, with the need for a scientific project to define the trip. The "Motivation of the trip" refers to the main reason that drives the tourist to undertake the trip, while the "Activities that the tourist can execute" describe the options available in the destination, either with or without a scientific dimension. The "Facilities used" refer to the resources that contribute to the production and constitution of the product, allowing it to be enjoyed in the receiving destination. The "Sub-forms that make up the forms of CT" help to delimit the focus of each form, while the "Proximity to another type of Tourism" indicates the relationship with other related or complementary types of tourism. Finally, the "Public/Participants" is addressed, focusing on the segment of tourists to which each form of CT is directed.

Table 8. Characteristics of Exploration and Adventure Tourism with a Scientific Dimension

Form of Science Tourism: EXPLORATION AND ADVENTURE TOURISM WITH A SCIENTIFIC DIMENSION			
N°	**Characteristics**	**Pond.**	**Remarks**
1	In relation to the participation of the actor (tourist) in the construction of the product/project/stay, it is strong / direct.	2	The YACO Caving and Canyoning Club and the International Group of Tactical Operators visit the Center in order to carry out and explore new sports and adventure activities, they perform sports such as: rappelling and canyoning.
2	the scientific dimension of the product and/or stay is Weak/peripheral	2	To develop sports and adventure activities, tourists explore the areas where they practice their activities, without the need to generate a document or scientific product
3	In relation to the Motivation of the trip.	2	The main motivation for the trip of tourists who visit SKIS for this modality is adventure and sport
4	In relation to the activities that tourists can carry out.	2	Exploration and adventure sports, however, the link with science is temporary.
5	In relation to the facilities you use.	1	They use guidance services, food.

6	In relation to the sub-forms that compose it	1	2. Cultural and sports explorations. 3. Ecotourism with a Scientific Dimension. 4. Scientific sports explorations. 5. The Integral Scientific Tourism Trip
7	In relation to other forms of tourism	1	It is related to sports, exploration, nature, wellness and recreational tourism, but not to scientific research tourism.
8	Audience and/or participants.	1	This activity is focused on adventurers, sportsmen and explorers with experience and knowledge, however, SKIS offers this form of CT to inexperienced people.
Total weighting = 12 points			

Table 8 reveals that Exploration and Adventure Tourism with a scientific dimension has reached a weighting of 12 points, equivalent to 75% of the total compliance with the required characteristics. Of the eight characteristics evaluated, half show partial compliance, while the other four fully comply with the established criteria.

Table 9. Characteristics of the form of Cultural Tourism with a Scientific Dimension

Form of Science Tourism: **CULTURAL TOURISM WITH A SCIENTIFIC DIMENSION**			
N°	**Characteristics**	**Pond.**	**Remarks**
1	In relation to the participation of the actor (tourist) in the construction of the product / project / stay is weak/indirect.	1	SKIS has available the volunteer program "Ecological Art" in which scientific murals have been made through drawing and painting on wood, in addition there is availability for anyone who has skills activities that are interconnected between art and science.
2	In relation to the scientific dimension of the product and/or stay, it is weak/peripheral.	2	The link with science is implicit, since it may be that the volunteer decides to carry out an activity that includes scientific production or dissemination or it may not
3	In relation to the Motivation of the trip.	1	The actor (tourist or volunteer) who visits SKIS will strengthen their knowledge and professional development through activities that allow the connection between art and science.
4	In relation to the activities that you can Run the Tourist	2	Carry out ecological activities linked to art, science and environmental education that allow us to understand and enjoy culture, with a scientific approach.
5	In relation to the facilities you use.	1	Lodging, food and technical tools.
6	In relation to the sub-forms that compose it	1	1. Scientific Exploration 2. Scientific Eco Volunteering 3. Ecotourism with a scientific dimension 4. Educational & Learning Trips & 5. Comprehensive scientific tourism trip.

7	In relation to the proximity to other forms of tourism	1	Ecotourism, cultural tourism, social tourism, educational tourism, tourism scientist ethnographic tourism, gastronomic tourism.
8	Audience and/or participants.	2	SKIS has the availability and flexibility to include anyone who is interested in cultural activities in culture and art.
Total weighting = 11 points			

Table 9. indicates that Cultural Tourism with a Scientific Dimension has obtained a weighting of 11 points, equivalent to 68.75% of the total compliance with the required characteristics. Of the eight characteristics evaluated, five show partial compliance, while the other three fully comply with the established criteria.

Table 10. Characteristics of the form of TC Eco Scientific volunteering

Form of Scientific Tourism: SCIENTIFIC ECO-VOLUNTEERING

N°	Characteristics	Pond.	Remarks
1	In relation to the participation of the actor (tourist) in the construction of the product / project / stay is weak/indirect.	1	Although SKIS has specific programs and activities for volunteers, it also has the availability to integrate anyone who wishes to be part of the volunteer team, where the activities that can be carried out are varied and in most cases are of affinity and preference which may or may not have a scientific focus.
2	In relation to the scientific dimension of the product and/or stay, it is strong and central.	1	Of the 10 programs aimed at volunteers, six of them are scientific and are part of the volunteer project, these are: Herpetology, Camera Traps, Ornithology, cave ecology. Ecological constructions, forest ecology.
3	In relation to the Motivation of the trip.	1	Not all programs aimed at volunteers are directly linked to scientific research, although most are linked to the protection and protection of human rights. Enhancement of species and natural habitats.
4	In relation to the activities that tourists can carry out.	2	The main activities carried out are: the collection of scientific data and scientific interpretation to facilitate tourism activity and subsequently disseminate it through academic papers, which are led by professional researchers.
5	In relation to the facilities you use.	2	Projects Existing transport guidance Lodging, food.
6	In relation to the sub-forms that compose it	2	1. Scientific eco-volunteering 2. Ecotourism with a scientific dimension. 3. Educational & Cultural Trips 4. Educational & Learning Trips 5. Comprehensive Scientific Tourism Trip
7	In relation to the proximity to other modalities of the tourism	2	Tourism of research scientist ecotourism, tourism educational tourism solidary Sustainable tourism.

8	Audience and/or participants.	2	Volunteering is organized in an empirical way, Aimed at anyone interested.
Total weighting = 13 points			

Table 10. reveals that Scientific Eco-Volunteering has reached a weighting of 13 points, equivalent to 81.25% of the total compliance with the required characteristics. In this case, five of the eight characteristics fully meet the criteria, while three show partial compliance.

Table 11. Characteristics of the form of TC Scientific Research Tourism

Form of Scientific Tourism: SCIENTIFIC RESEARCH TOURISM			
N°	**Characteristics**	**Pond.**	**Remarks**
1	In relation to the participation of the actor (tourist) in the construction of the product/project/stay It's strong/direct.	2	There is a strong and direct relationship as researchers choose their area of interest to investigate and decide the length of stay, strategies and tools they will use in their research.
2	In relation to the scientific dimension of the product and/or stay, it is Strong/Central	2	SKIS has several approaches to research involving biologists, professors, naturalists, students, and other professionals who are actively involved in the research process. research.
3	In relation to the Motivation of the trip.	2	Researchers are motivated by the production of scientific material that can be developed based on specific areas such as herpetology, ornithology, and chambers trap.
4	In relation to the activities that tourists can carry out.	2	The main activities are focused on experimentation, discovery and learning, through of New Discoveries Made by research mentioned above.
5	In relation to the facilities you use.	2	Transportation, lodging, lodging, guidance, food, and scientific research equipment.
6	In relation to the sub-forms that compose it	2	1. Scientific Exploration 2. Scientific eco-volunteering 3. Scientific research 4. Sports Explorations 5. Educational & Learning Trips 6. Comprehensive Scientific Tourism Trip
7	In relation to the proximity to other forms of tourism	2	Ecotourism, business tourism, educational tourism, ecotourism, solidarity tourism, sustainable tourism, responsible tourism, ethnographic tourism.
8	Audience and/or participants.	2	SKIS allows research to: any volunteer, professors, researchers and students
Total weighting = 16 points			

Table 11. It highlights that Scientific Research Tourism has achieved the highest weighting among all forms, with a total of 16 points, equivalent to 100% compliance. Each element in this way fulfills the essential characteristics of Research Tourism.

Table 12. Summary of the identification of CT forms that are developed in SKIS

FORMS OF CT THAT ARE DEVELOPED ON SKIS					
N°	**Characteristics**	**Exploration & Adventure Tourism with Scientific dimension**	**Cultural tourism with a dimension scientist**	**Scientific Eco Volunteering**	**Scientific Research Tourism**
1	**In relation to the scientific dimension of the product and/or stay.**	2	1	1	2
2	**In relation to the scientific dimension of the product**	2	2	1	2
3	**In relation to the Motivation of the trip.**	2	1	1	2
4	**In relation to the activities that you can run the tourist.**	2	2	2	2
5	**In relation to the facilities you use.**	2	1	2	2
6	**In relation to the sub-shapes that compose it**	1	1	2	2
7	**In relation to the proximity to other modalities of the tourism**	1	1	2	2
8	**Audience and/or participants.**	1	2	2	2
	TOTAL	**12**	**11**	**13**	**16**

Results of **Specific Objective 3 (SO3):** Propose a tourism product for one of the identified forms of TC.

Considering the forms of TC with the lowest percentage of compliance according to the previous results and the potentialities of SKIS, it was agreed with the administrators to focus the development of the tourism product in the form of TC: Cultural Tourism with a scientific dimension, which is described below.

Demand analysis: The demand analysis carried out by (Silva, 2018) was considered,

which identifies the potential market as university teachers and researchers with a preference for the form of scientific tourism called scientific expedition, willing to allocate 2 to 4 days and with an interest in tourism and heritage. In addition, tour operators show a predisposition to establish alliances with research centers, highlighting their interest in the form of scientific tourism called exploration and adventure, with emphasis on the service of specialized guides, as pointed out by (Enricci, 2014) in relation to a "conservationist" approach to demand, considering the non-renewable nature of many attractions.

Supply analysis: In the study previously mentioned by Silva (2018), it is confirmed that the complementary supply in the region includes private protected forests and public research stations or centers. These places are mainly visited by university students and research professors, motivated by carrying out research work, observation tours or the execution of practices and internships. The frequency of visits ranges from 1 to 2 times a year, and most visitors choose to stay overnight at these sites. Arrival at these places is usually through agreements with universities or on their own, and during the visit, participants require services such as specialized guides, lodging and food (p. 80).

Cultural Tourism Product with a Scientific Dimension

This product has been designed with those who are interested in natural and social aspects, as well as historical and territorial dimensions. It seeks to motivate tourists to undertake trips in an enriching and harmonious way, promoting learning and valuing cultural and natural resources, recognizing their significant importance.

Purposes of the tourism product

1. Exploit the available activities and attractions, identifying their potential to generate interest among tourists and attract their visit to the Sumak Kawsay In Situ Research Center.
2. To awaken the interest of a wider public in tourism activity, highlighting its dual focus on learning and on the protection and preservation of nature and culture.
3. Establish SKIS as a relevant attraction that presents tourism as a sustainable and sustainable option.

Tourism Product Focus

This tourism product has been designed with an approach focused on ecotourism, which is part of cultural tourism with a scientific dimension. A tourist package has been created that includes both natural and cultural activities, with a scientific and educational orientation. Tourists have the opportunity to participate in activities such as the identification of species of flora and fauna, environmental education, hiking, among other enriching experiences.

Table 13. Tourist package for the form of Cultural Tourism with Scientific Dimension (ecotourism)

	Jungle and In Situ Connection
Duration	Two days, two nights
N of pax	10
	INCLUDES
Transport.	from Mera to SKIS AND from SKIS to Mera
Feeding	Breakfast (2) Lunch (2) Snacks (1) Snack (2)
Guidance	Specialist biologist

Lodging	Two nights
Recommendations: camera, insect repellent, sunscreen, boots, rain poncho, comfortable clothes.	

Source: Scientific tourism in natural areas case Sumak Kawsay In Situ Research Center (SKIS), Mera canton, Pastaza province (2020) **Author:** Vallejo Narváez Carlos Estuardo – **Co-author:** María Germania Gamboa Ríos.

Table 14. Variable Costs of the Tour Package

SERVICE	ITEM	QUANTITY	USD/U	USD / pax
Feeding	Breakfast	2	5	5
	Lunch	2	5	5
	Snack	1	1	2
	Snack	2	5	5
Guidance	Guiding per day	2	40	4
Transport	Round trip	1	40	4
Workshops	Reptile Handling	1	4	0.40
	Sustainable agriculture	1	4	0.40
	Yoga/Meditation	2	3	3
TOTAL				**28.80**

Source: Scientific tourism in natural areas case Sumak Kawsay In Situ Research Center (SKIS), Mera canton, Pastaza province (2020) **Author:** Vallejo Narváez Carlos Estuardo – **Co-author:** María Germania Gamboa Ríos.

Table 15. Fixed Costs of the Tour Package

ITEM	%	USD
Promotion	10%	2.88
		31.68
Depreciation	12%	3.80
		35.48
Administrative expenses	11%	3.90
		39.48
Usefulness	18%	7.10
Unitary P.V.P.		**47**
P.V.P. 10 PAX		**466**

Considering fixed and variable costs, the retail price of the "Selva" package is $47 per person, and for a group of ten people, it is worth $466. This price includes an estimated 18% profit, 11% administrative expenses, and 12% depreciation. The distribution of the product will be mainly through social networks such as Facebook and Instagram, as well as on the website. In addition, a collaboration will be established with partner travel agencies, such as Hayawaska Tours and Shiran Nantu, to ensure effective and direct distribution to tourists.

DISCUSSION

The information provided about Sumak Kawsay In Situ (SKIS) is quite detailed and offers a comprehensive overview of its features, services, projects, administrative management, and collaborations. The detailed study of biodiversity, both flora and fauna, at SKIS reveals a unique environment with species yet to be discovered (SKIS, 2019). The presence of independent researchers and collaboration with national and international academic

institutions underscore the scientific importance of SKIS as a research center (Bentley et al., 2018). Specific projects, such as Herpetology and Subterranean Ecology, demonstrate the diversity of scientific approaches carried out at SKIS, from species exploration to subterranean ecosystem assessment (SKIS, 2019).

The biodiversity and environmental characteristics described align with the importance of the Amazon region (Bentley et al., 2018), in contrast to similar areas or analysis of how unique features affect biodiversity. Biological diversity, especially in flora and fauna, is reinforced by studies of (Larson, 2019), (Neill, & Simpson et al., 2013). It could be compared with other areas of the Amazon to contextualize the uniqueness of the species discovered. Collaboration with foundations and the active participation of volunteers and tourists is supported by the literature on science tourism (Hvenegaard et al., 2017), comparing the SKIS approach with other similar centers in terms of community participation and contribution to research. Collaboration with universities and companies is aligned with common strategies in the management of research centres (Bramwell & Lane, 2000). The effectiveness of the agreements can be evaluated and compared with success stories in the management of similar centres. The diversity of natural and cultural attractions in SKIS is related to the importance of ecotourism (Fennell, 2015).

The diversification in the distribution of activities in water, air and land follows sustainable tourism principles that seek to minimize negative impacts (Butler, 1999). This has made it possible to explore how other tourist facilities have addressed the diversification of activities and their impact on the visitor experience (Mowforth & Munt, 2009). The assessment of the scientific potential of forests in SKIS is supported by the literature highlighting the importance of primary forests for research and conservation (Gibson et al., 2011), and is therefore compared with the assessment methodology used by SKIS with other studies assessing the scientific potential of tropical forests (Turner et al., 2015).

The participation of the tourist in the construction of the product/project/stay underlines the importance of actively involving the tourism actor in the formulation of experiences, which coincides with the literature on the co-creation of value in tourism (Prahalad & Ramaswamy, 2004).

The consideration of the "Scientific dimension of the product and/or stay" as an essential element highlights the need for tourism activities to be intrinsically linked to science from their conception. This aligns with the perspective that science tourism does not only involve observing science, but actively participating in it (Hose, 2001), underlining an immersive experience for tourists. The emphasis on "Travel Motivation" as a fundamental criterion reflects the importance of understanding the intrinsic motivations that drive tourists towards scientific experiences. This perspective is supported by the theory of tourist motivation (Pearce, 1982), which recognizes that motivation plays a crucial role in tourist choice and satisfaction.

The decision to focus the development of the tourism product in the form of Cultural Tourism with a scientific dimension, instead of other forms of Scientific Tourism with a lower percentage of compliance, is based on the identification of a specific potential market and the predisposition of tour operators to establish alliances. This approach aligns with the recommendations of (Silva, 2018) and (Enricci, 2014). According to (Silva, 2018), the potential market for this form of scientific tourism is mainly composed of university professors and researchers with a preference for scientific expeditions. These tourists would be willing to dedicate 2 to 4 days to the experience and have a specific interest in tourism and heritage. This demand analysis provides a solid basis for market segmentation and product tailoring to the needs of this specific group. In addition, the willingness of tour operators to establish alliances, as highlighted by (Enricci, 2014), indicates a particular interest in the form of scientific tourism that involves exploration and adventure. This "conservationist" approach to demand aligns with the non-renewable nature of many of the attractions at SKIS, suggesting an awareness of the importance of preservation.

CONCLUSIONS

- The SKIS, a Scientific Research Center in the province of Pastaza, Ecuador, is strategically located in the buffer zone of the Llanganates National Park, covering 95 hectares with a focus on environmental development with social responsibility. The infrastructure, although simple, demonstrates efficiency in the management of natural resources, taking advantage of rainwater and solar energy. The region is home to a unique biodiversity supported by a peculiar geology, with high scientific potential due to the presence of highland and lowland ecosystems.
- The flora at SKIS features remarkable species, some rediscovered after centuries. The fauna exhibits a rich variety, including endemic species and some potentially new to science. SKIS has evolved from small projects to broader programs, involving volunteers and tourists in conservation, research, and environmental education activities. Classified projects in development, independent, and future show the ongoing commitment to research and conservation.
- Although it lacks its own board, SKIS follows a strong organizational structure. Collaborations with government institutions, universities and companies support its activities. SKIS presents a wide range of natural and cultural attractions. The evaluation of the scientific potential reveals that most of the attractions have a low potential, but the Primary and Secondary Forest stand out with a high and medium potential, respectively. A number of tourism activities aligned with adventure tourism guidelines have been identified. Water, land, and air activities offer varied experiences for visitors.
- SKIS has significant scientific potential, especially in its primary forests, which are noted for their high biodiversity. Biological diversity, both in flora and fauna, offers valuable opportunities for ecological research and studies. The existence of endemic species and the constant identification of new species, both in plants and animals, underlines the importance of this space for the scientific community and the conservation of biodiversity.
- Although SKIS has significant scientific potential, its current tourism infrastructure has limitations. The lack of basic services such as electricity and drinking water, as well as the rudimentary structure of its facilities, could affect the visitor experience and the comfort of researchers. Improving tourism infrastructure could facilitate greater participation and economic contribution of tourists interested in scientific and ecotourism activities.
- Despite the valuable scientific and tourism offer of SKIS, administrative management seems to depend to a large extent on the SKIS Foundation and external agreements, such as agreements with universities and tourism companies. The sustainable development of SKIS could benefit from more independent management strategies and the active promotion of its attractions, with the aim of attracting a wider and more diverse audience, as well as the search for additional sources of funding for the maintenance and improvement of the reserve.
- The decision to focus the development of the tourism product in the form of "Cultural Tourism with a Scientific Dimension" arises from a weighted analysis between the forms of CT with less compliance and the potentialities identified in SKIS. This strategic approach demonstrates an intelligent adaptation to market trends and the strengths of the destination.
- The pricing strategy, considering fixed and variable costs, results in a price of $47 per person and $466 for a group of ten. The planned distribution through social networks, website and collaborations with partner travel agencies ensures a wide and effective dissemination of the product. This integrated approach can optimize the visibility and accessibility of the tour package.

REFERENCES

- Bentley, et al. (2018). "Ecological Study in the Upper Anzu River Zone."
- Larson (2019). "Scientific Report of the SKIS Environmental Training Center."

- Neill, (Plot 1) 2019. "Botanical Exploration on SKIS."
- Simpson et al. (2013) and Arias-Gutiérrez et al. (2016). "Discovery of New Orchid Species in the Llanganates-Sangay Corridor."
- SKIS. (2019). "Scientific Report Raised at the Sumak Kawsay In Situ Environmental Training Center."
- Hose, T. A. (2001). "Ecotourism and the conservation ethic: Recruiting the uninitiated or preaching to the converted?" Journal of Sustainable Tourism, 9(4), 317-341.
- Pearce, P. L. (1982). "The Social Psychology of Tourist Behaviour." Oxford: Pergamon Press.
- Faulkner, B. (2001). "Towards a framework for tourism disaster management." Tourism Management, 22(2), 135-147.
- Arias-Gutiérrez, R. I., Reyes-Puig, J., Tapia, A., Terán, A., López de Vargas, K., Bermudez, D., & Rodríguez, X. (2016). Local development and conservation on the eastern slope of the Andes: Llanganates-Sangay ecological corridor – valley of the Anzu. Revista Amazónica Science and Technology,5(1), 54-68 Recovered of
- https://revistas.proeditio.com/REVISTAMAZONICA/article/view/2202/2262
- Bentley, A., Kirsis, K., Besson, J., & L. Cashman (2018). Herpetological Transect Surveying, Sumak Kawsay In Situ, Mera, Pastaza
- Revelo, R. (2017). Study of the benefits of having a Research Station in the Amazon. Magazine Publishing 4(10), 505-519.
- Nieto, J., Román, I., Bonillo, D., Paulova, Nastute. (2016). Tourism Worldwide. International Journal of Scientific Management and Tourism, 2(1), 129-144. Retrieved from https://dialnet.unirioja.es/servlet/articulo?codigo=5665915
- World Tourism Organization (2019), International Tourism Overview, 2019 edition, UNWTO, Madrid, doi: https://doi.org/10.18111/9789284421237
- Bourlon, F., Farmer, I., Segura, P., & Osorio, M. (2012). Science at the service of Tourism Development. Creating the Center for Scientific Tourism in Patagonia. Chile. Retrieved from https://issuu.com/centrodeturismocientifico/docs/informe_final_ctcp
- Bourlon, F., & Mao, P. (2011). The Forms of Science Tourism in Aysén, Chile. Tourism Management, (15), 74-98. doi: 10.4206/gest.tur.2011.n15-04
- Silva, Marta. (2018). CIPCA Natural and Cultural Heritage for the Development of Scientific Tourism, as a Reference in the Amazonian University Context (Postgraduate Thesis). Amazon State University, Puyo, Ecuador.
- Simpson, Nigel & Reyes-Puig, Carolina & Tobar, Cecilia & Yánez-Muñoz, Mario. (2013). Herpetofauna in priority areas for conservation: The Jocotoco and Ecominga Reserve System. MECN-JOCOTOCO-ECOMINGA 2013.
- SKIS (2020). Volunteer projects. Mera, Pastaza, Ecuador. Sumak Kawsay In Situ Foundation.
- Retrieved from https://www.sumakkawsayinsitu.org/projects
- SKIS. (2019) Scientific report carried out at the Sumak Kawsay In Situ environmental training centre.