



Asia-Pacific Mountain Tourism Development Report

Issues, Trends, Opportunities and Strategies (2025)

亚太山地旅游发展报告

IMTA & PATA

国际山地旅游联盟
亚太旅游协会



International Mountain Tourism Alliance (IMTA) Headquarters
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PREFACE

Mountains stand as monumental testaments to the grandeur of nature's craftsmanship and the cradle of human civilization. Their extraordinary topography and vibrant cultural ecosystems have forged a global treasure trove of tourism value. In an era marked by growing global cultural synergy and innovations in tourism models, mountain tourism has transcended its traditional boundaries to become an integrator of economic vitality, ecological stewardship, and cultural exchange - a cornerstone in the global pursuit of sustainable development. As globalization accelerates, climate change intensifies, and tourism models continue to evolve, the strategic importance of mountain tourism in the Asia-Pacific region has become even more prominent.

The *Asia-Pacific Mountain Tourism Development Report* delves into the intricate and multifaceted paradigm of mountain tourism development across the region. It dissects the opportunities and challenges that lie ahead, seeking a harmonious equilibrium for sustainable mountain tourism. This report elucidates how sustainable tourism can promote economic development, foster cultural dialogue, and safeguard our natural environment. It presents visionary and pioneering strategies and recommendations to illuminate the path forward for the industry. Ultimately, this research will contribute to the continuous progress of mountain tourism governance in the Asia - Pacific region and even globally in the directions of innovation, inclusiveness, and sustainability.

The report highlights that climate change, overtourism, and ecological degradation have emerged as formidable threats to the tourism sector, relentlessly chipping away at the breathtaking beauty of mountain landscapes. The Asia-Pacific region, home to some of the world's most fragile and sensitive mountain ecosystems and a unique tapestry of interwoven multiculturalism, is



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in dire need of protection mechanisms tailored to its distinctive regional features. Such mechanisms are essential for ensuring the intergenerational preservation of both natural and cultural heritage. In this endeavor, we must draw inspiration from advanced mountain governance practices. Despite being under immense pressure, the mountain tourism sector in the Asia-Pacific has rejuvenated itself thanks to its strong resilience and iterative ability. Innovative measures, such as the rapid rise of personalized, immersive mountain tourism experiences, the transformative power of artificial intelligence in smart tourism management, the expansion of air networks and visa facilitation measures that unlock market potential, as well as enhanced mountain safety services, are collectively driving a reconstruction of the industry's value chain.

The mountain tourism industry is of great significance. It sustains the livelihoods and well-being of many people, empowers the sustainable development of communities, and creates opportunities for global tourists to live in harmony with nature in rich and transformative ways. As

an international organization dedicated to the sustainable development of mountain tourism with the mission of "protecting mountain resources, preserving mountain civilization, and promoting the mountain economy to the benefit of mountain communities," the International Mountain Tourism Alliance (IMTA) is uniquely positioned to drive consensus within the industry. It should actively align with the *United Nations' 2030 Agenda for Sustainable Development* and provides effective strategic guidance for the sustainable development of mountain tourism across the Asia-Pacific region. This report, jointly compiled with the Pacific Asia Travel Association (PATA), is not only an industry insight but also a call to action. We call on all stakeholders to unite with a spirit of positivity, openness, dialogue, and mutual benefit, collectively propelling the diversified and innovative development of mountain tourism in the Asia-Pacific region. By intertwining community well-being, cultural heritage, and ecological concepts into a cohesive framework, we can forge a global mountain community with a shared future. In doing so, mountain tourism will emerge as a torch lighting the path to sustainable development.

山地，镌刻着自然造化的史诗，承载着人类文明的根系，以奇特的地形地貌和多彩的人文生态构成世界共享的旅游价值。在全球文明互鉴共识凝聚、旅游模式创新背景下，山地旅游已演进为经济、生态与人文共生的综合载体，载入全球可持续发展的重要议题。在全球化进程推进、气候变化不断加剧、旅游模式革新演变的时代背景下，亚太地区山地旅游的重要战略意义愈发凸显。

《亚太山地旅游发展报告》立足亚太地区复杂多元的山地旅游发展格局，对业界所面临的机遇和挑战进行深入剖析，探寻可持续山地旅游的平衡之道，系统阐释可持续旅游对促进经济发展、推动文明互鉴、守护生态环境的深远影响，提出具有前瞻性和探索性的战略展望和专业建议，为业界提供创新指引。该研究将有助于促进亚太乃至全球山地旅游治理朝着创新性、包容性、可持续性方向不断进取。

报告指出，气候变化、过度旅游、生态退化等问题已构成旅游业的严峻威胁，持续侵蚀着绝美山地景观。亚太地区拥有全球最脆弱敏感的山地生态系统与多元文化交织的特殊性，亟需探索符合区域特质的保护机制，以实现自然和文化遗产的代际传

承，这方面我们需要借鉴先进的山地治理经验。尽管承受多重压力，亚太山地旅游凭借其强大韧劲和迭代能力依然焕发新生：个性化沉浸式山地旅游快速崛起，人工智能赋能智慧旅游管理，航空网络扩容与签证便利化释放市场活力，山区安全服务体系提质升级等创新举措，正推动产业价值重构。

山地旅游产业意义重大，它承载着数广大民众的生计福祉，赋能社区可持续发展，以丰富且具有变革意义的方式为全球游客创造了人与自然和谐共生的契机。作为以保护山地资源、传承山地文明、促进山地经济、造福山地民众，致力于可持续山地旅游发展为宗旨的国际组织，国际山地旅游联盟有责任促进山地旅游业界形成共识，积极响应联合国《2030年可持续发展议程》，为亚太山地旅游可持续发展提供有效指引。这份与亚太旅游协会联合编制的报告，不仅是一份业界洞察，更是一份行动倡议。我们呼吁各方携手并进，以积极、开放、对话、共惠的姿态，共助亚太山地旅游多元创新发展，唯有将社区福祉、文化根脉与生态理念编织成网，才能构筑全球山地命运共同体，使山地旅游真正成为照亮可持续发展道路的火炬。

CORE AUTHOR BIOGRAPHIES

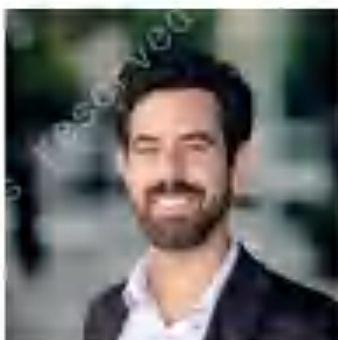
《报告》核心成员简介



Peter Semone is a leading tourism expert specializing in the Pacific Asia region. He has been elected Chairman of the Board of the Pacific Asia Travel Association (PATA) for two terms. Peter has served in leadership roles for international donor funded projects in Timor-Leste, Lao PDR and Vietnam and is frequently called upon as a short-term expert to UN Tourism and the Asian Development Bank. Peter is the founder of the internationally acclaimed Lao National Institute of Tourism and Hospitality (LANITH) vocational school.

After graduating from UPENN and Cornell, he resided in Indonesia where he established several tourism enterprises and served as an expert tourism adviser to the Government of Indonesia. Peter is widely published in peer-reviewed journals on topics related to tourism marketing and destination human capital. He has also authored tourism policies, strategies and action plans for destinations at regional, national and municipal levels.

彼得·西蒙 (Peter Semone) 是亚太地区资深旅游专家，现任亚太旅游协会 (PATA) 主席 (连任两届)，主导过东帝汶、老挝及越南的国际援助项目，并曾作为短期专家为联合国旅游组织及亚洲开发银行提供咨询支持。他创办了国际知名的老挝国家旅游与酒店学院 (LANITH)，该机构现为亚太地区职业培训领域的标杆单位。彼得持有宾夕法尼亚大学与康奈尔大学学位，曾在印度尼西亚创立多家旅游企业，现任马来西亚泰莱大学 (Taylor's University) 客座教授，并担任印尼政府高级旅游顾问。其学术成果发表于多部同行评审期刊，研究领域聚焦旅游目的地营销与人力资本开发，同时主导区域、国家及城市层级的旅游政策制定与战略规划。



Mark Panayiotis Notaras is an international tourism and development expert with over 20 years of experience across Asia and the Pacific. He has worked with the United Nations University, AusAID, GIZ, and international NGOs, focusing on sustainable tourism, rural development, and inclusive growth. Mark founded the Timor-Leste Food Lab, a pioneering initiative that connected rural producers to urban markets and positioned the country as a culinary destination. He also advised the Tourism for All program in Timor-Leste on mountain tourism product development, supporting community-based trekking and cultural experiences. He has mentored tourism entrepreneurs in

Timor-Leste and the Pacific, helping to strengthen local value chains and build sustainable livelihoods. A member of the World Rural Tourism Council, Mark attended the 2024 WRTC Conference in Suzhou, China, contributing to global rural tourism dialogue. He continues to advise governments and social enterprises on inclusive tourism across the region.

马克·帕纳约蒂斯·诺塔拉斯 (Mark Panayiotis Notaras) 是国际旅游与发展领域的专家，在亚太地区拥有逾20年从业经验。他曾与联合国大学、澳大利亚国际发展署 (AusAID)、德国国际合作机构 (GIZ) 及国际非政府组织合作，深耕可持续旅游、乡村发展与普惠增长领域。他发起东帝汶食品实验室 (Timor-Leste Food Lab)，通过链接乡村生产者与城市消费市场，助力该国打造美食旅游目的地形象。他曾为东帝汶“全

民旅游” (Tourism for All) 项目提供山地旅游产品开发指导，推动社区徒步旅行与文化体验项目落地。长期为东帝汶及太平洋岛屿旅游创业者提供能力建设支持，协助完善在地价值链与可持续生计体系。作为世界乡村旅游理事会成员，参与2024年苏州理事会会议并推动行业对话。现持续为亚太多国政府及社会企业提供包容性旅游发展策略咨询。

Joseph Freach is a researcher and data analyst specializing in international tourism and development, with over a decade of experience across Timor-Leste, the Pacific Islands, and more recently, China. He holds a Master of Sustainable Development from Macquarie University and a Bachelor of Science in Biology from Kansas State University, giving him both analytical depth and field-based research capabilities. Joseph brings advanced expertise in analysing complex datasets, tourism forecasts, and community surveys, with a strong focus on rural tourism systems, inclusive development, and program evaluation. He has delivered over 25 research and consulting assignments for organizations such as the ILO, Oxfam, DAI, Mercy Corps, and Adam Smith International. His work bridges evidence and impact—guiding governments, NGOs, and development agencies in designing tourism policies and strategies that are data-informed, context-sensitive, and locally grounded. He is also published in peer-reviewed journals and has led major research outputs in agriculture-tourism linkages.



约瑟夫·弗里奇 (Joseph Freach) 是国际旅游与发展领域研究员兼数据分析师，在东帝汶、太平洋岛屿及中国等地拥有十余年从业经历。其学术背景包括麦考瑞大学可持续发展硕士学位及堪萨斯州立大学生物学学士学位，兼具量化分析与田野研究能力。擅长复杂数据建模、旅游趋势预测及社区调研方法论，研究聚焦乡村旅游体系构建、普惠发展路径及项目成效评估。已为国际劳工组织 (ILO)、乐施会 (Oxfam)、DAI、美慈组织 (Mercy Corps) 及亚当·斯密国际 (Adam Smith International) 完成25项以上研究咨询项目，有效衔接实证与实务，协助政府、非政府组织及发展机构制定数据驱动、因地制宜的旅游政策与战略。学术成果发表于多本同行评审期刊，并主持农业与旅游业协同发展领域的核心研究项目。

In addition to the professional contributions of the above three key experts, the planning and compilation of this report received guidance and strong support from the leadership of the International Mountain Tourism Alliance (IMTA). The report also benefited from extensive participation through online expert seminars and consultations, including insights from Francesco Frangialli, Honorary Secretary-General of UNWTO; Ajay Prakash, Global President of the International Institute for Peace Through Tourism (IIPT); Paul Rogers, Co-Founder & Director of the "Planet Happiness" project under the Happiness Alliance; and Armelle Solelhac, Founder & CEO of SWITCH, a tourism and outdoor sports branding and ESG strategy consulting firm. Members of the IMTA Secretariat, including LIU Guosong, YUAN Xiaoyu, and DENG Shijie, and the regional director of Greater China region of PATA, Ms. Maggie Lv, played active roles in the editorial implementation, and related coordination work.

除了以上三位主要专家的专业贡献，本报告在策划过程中得到了国际山地旅游联盟领导的指导和有力推动，还通过网络专家研讨会和咨询等形式得到多方人士的悉心参与，其中包括联合国旅游组织荣誉秘书长弗朗西斯科·弗朗加利、国际和平旅游研究院主席阿贾伊·普拉卡什、“幸福联盟”旗下“快乐星球”项目联合创始人兼董事保罗·罗杰斯、旅游和户外运动品牌与ESG战略咨询公司SWITCH创始人兼首席执行官阿尔梅勒·索莱纳克等。联盟秘书处刘国松、袁晓宇、邓世杰，以及亚太旅游协会大中华区主任吕咏梅等在编辑执行及相关配合方面发挥了积极作用。



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Wanfenglin in Xingyi, Guizhou, China
中国贵州兴义万峰林

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EXECUTIVE SUMMARY

The mountains of the Asia-Pacific region—spanning the Himalayas, the Southern Alps, the Japanese and Indonesian archipelagos, and the Pacific's volcanic belts—stand as some of the most iconic and diverse landscapes on Earth. They serve as guardians of culture, biodiversity, and livelihoods. Yet some fragile highlands face complex pressures. In a time of climate volatility, accelerating tourism demand, and technological transformation, the sustainable future of Asia-Pacific mountain tourism urgently depends on thoughtful stewardship, informed strategy, and inclusive governance.

The *Asia-Pacific Mountain Tourism Development Report* jointly compiled by the International Mountain Tourism Alliance (IMTA) and the Pacific Asia Travel Association (PATA), offers a foundational framework for securing that future. It presents a robust situational analysis, identifies emerging risks and growth patterns, and provides forward-looking recommendations to ensure mountain tourism remains a pillar of sustainable development in the region.

Mountain tourism is not only culturally and environmentally significant, but economically vital. According to the report, it represents up to 17% of international arrivals in the Asia-Pacific region, encompassing millions of visitors annually to flagship destinations such as Nepal's Annapurna Circuit, Mount Fuji in Japan, the Southern Alps of New Zealand, and China's Huangshan Mountain. The regional tourism economy is rapidly rebounding post-COVID: by 2026, international arrivals are expected to surpass 900 million, with tourism expenditures nearing USD 1 trillion. Globally, the mountain tourism sector attracts approximately 375 million visitors annually,

contributing 15–20% of total tourism revenue.

However, the *Asia-Pacific Mountain Tourism Development Report* details escalating multiple threats to these gains. Key concerns include biodiversity loss (up to 30% in some mountain ecosystems), widespread glacial retreat, and increased natural disasters such as avalanches, landslides, and floods. Projections within the report suggest that up to two-thirds of Himalayan glaciers could disappear by 2100 under current warming trends. The tourism infrastructure in many mountainous regions is also underdeveloped, particularly in more remote or lower-income areas, which heightens safety concerns and limits economic potential.

Technological shifts are also reshaping the sector. As the report notes, 63% of travel transactions worldwide were made online in 2023, and the global digital travel market is forecast to exceed USD 1 trillion by 2030. While such platforms expand reach, the digital divide remains a key constraint in many mountain communities that lack sufficient connectivity, training, and access to digital tools.

The report positions IMTA as a central actor in addressing these challenges. Founded in 2017, IMTA is dedicated to the sustainable development of mountain tourism with the mission of "protecting mountain resources, preserving mountain civilization, and promoting the mountain economy to the benefit of mountain communities." Through establishing dialogue platforms for members, conducting research on mountain tourism industry development, and deepening collaboration with international tourism-related organizations, IMTA continuously promotes

the prosperity of global sustainable mountain tourism.

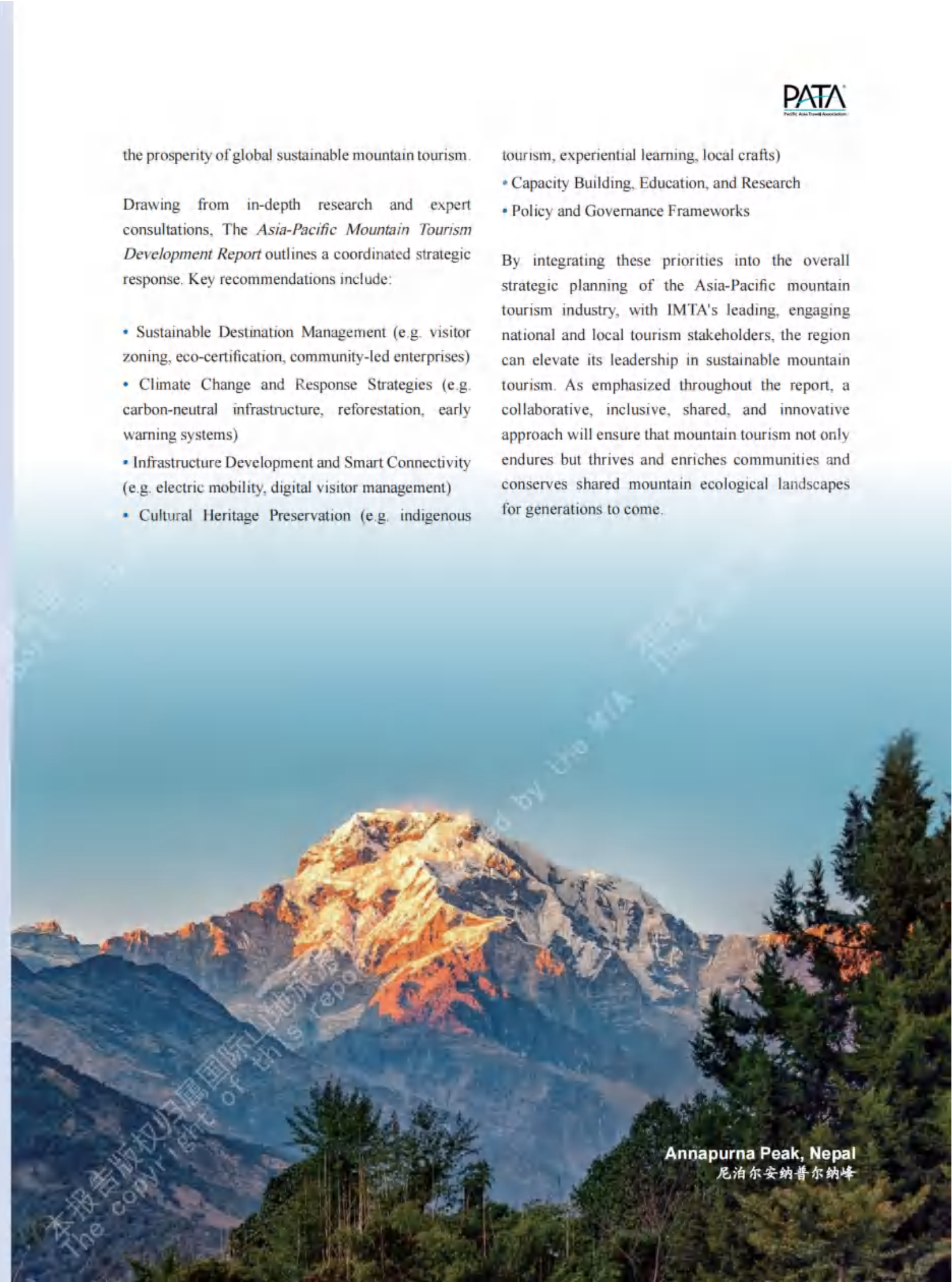
Drawing from in-depth research and expert consultations, The *Asia-Pacific Mountain Tourism Development Report* outlines a coordinated strategic response. Key recommendations include:

- Sustainable Destination Management (e.g. visitor zoning, eco-certification, community-led enterprises)
- Climate Change and Response Strategies (e.g. carbon-neutral infrastructure, reforestation, early warning systems)
- Infrastructure Development and Smart Connectivity (e.g. electric mobility, digital visitor management)
- Cultural Heritage Preservation (e.g. indigenous

tourism, experiential learning, local crafts)

- Capacity Building, Education, and Research
- Policy and Governance Frameworks

By integrating these priorities into the overall strategic planning of the Asia-Pacific mountain tourism industry, with IMTA's leading, engaging national and local tourism stakeholders, the region can elevate its leadership in sustainable mountain tourism. As emphasized throughout the report, a collaborative, inclusive, shared, and innovative approach will ensure that mountain tourism not only endures but thrives and enriches communities and conserves shared mountain ecological landscapes for generations to come.



Annapurna Peak, Nepal
尼泊尔安娜普尔纳峰

执行摘要

亚太地区的山脉体系，涵盖喜马拉雅山脉、南阿尔卑斯山脉、日本列岛、印度尼西亚群岛及太平洋火山带，构成了地球上最具代表性与多样性的景观集群，是社区生计、生物多样性保护与文化遗产的重要载体。然而，在气候波动加剧、旅游需求激增与技术变革的时代背景下，一些生态脆弱的高海拔山区正面临多重压力叠加的复杂挑战。亚太山地旅游的可持续发展未来亟需审慎的管理、明智的战略和包容性的治理。

《亚太山地旅游发展报告》由国际山地旅游联盟（IMTA）与亚太旅游协会（PATA）联合编制，旨在构建支撑山地旅游未来发展的基础性框架。报告通过详实的情景分析，识别新型风险与增长机遇，并提出前瞻性战略建议，以确保山地旅游持续发挥其在区域可持续发展中的支柱性作用。

山地旅游不仅具备重要的文化生态价值，还

发挥着关键的经济驱动作用。数据显示，该业态占亚太地区国际游客总量的 17%，每年有数百万游客涌入尼泊尔安纳普尔纳环线、日本富士山、新西兰南阿尔卑斯山脉及中国黄山等标志性目的地。后疫情时期区域旅游经济复苏强劲：预计至 2026 年，国际游客规模将突破 9 亿人次，旅游消费总额接近 1 万亿美元。而在全球范围内，山地旅游年接待量约 3.75 亿人次，贡献旅游业总收入的 15%–20%。

报告同时揭示，山地旅游的既有发展成果正面临多重威胁持续升级的严峻形势。核心问题包括生物多样性衰退（部分山地生态系统退化幅度达 30%）、冰川大规模消融及雪崩、滑坡、洪水等自然灾害频发。模拟预测显示，在当前气候变暖趋势下，至 2100 年喜马拉雅冰川可能消失近三分之二。此外，许多山区，尤其是偏远及欠发达地区的旅游

基础设施仍欠完善，既增加了安全风险隐患，也制约了经济潜能的释放。

技术变革正在重塑产业格局。2023 年全球 63% 的旅游交易通过线上完成，预计至 2030 年，数字旅游市场规模将突破 1 万亿美元。尽管线上平台拓宽了市场覆盖面，但山地社区仍受网络连通性不足、数字化培训缺乏以及数字工具获取渠道有限等“数字鸿沟”问题的显著制约。

报告强调了国际山地旅游联盟（IMTA）在应对上述挑战中的核心作用。自 2017 年成立以来，联盟始终以保护山地资源、传承山地文明、促进山地经济、造福山地民众，致力于可持续山地旅游发展为宗旨，通过搭建会员对话交流平台、开展山地旅游产业发展研究、深化与国际涉旅机构的协作，持续推动全球可持续山地旅游业繁荣发展。

基于深度调研与专家论证，本报告提出系统性

战略对策，重点涵盖以下实施路径：

- 可持续性目的地管理；
- 气候变化与应对策略；
- 基础设施建设与智慧互联；
- 文化遗产传承保护；
- 能力建设教育与研究；
- 政策与治理框架。

通过将上诉优先事项纳入亚太山地旅游行业整体的战略规划，并在国际山地旅游联盟（IMTA）的引领下，联动国家及地方旅游利益相关方协同推进，亚太地区有望提升其在可持续山地旅游领域的领导地位。报告特别强调，唯有采取协作、包容、共享、创新的发展路径，方能确保山地旅游实现代际传承，在促进社区繁荣的同时，守护人类共有的山地生态景观。

ACRONYMS/ABBREVIATIONS

缩写 / 简称对照表

ADB	Asian Development Bank 亚洲开发银行
AI	Artificial Intelligence 人工智能
AR	Augmented Reality 增强现实
BRI	Belt and Road Initiative “一带一路” 倡议
CBT	Community-based Tourism 社区型旅游
COVID-19	Coronavirus Disease 2019 2019 新型冠状病毒
EV	Electric Vehicle 电动汽车
FAO	Food and Agriculture Organization of the United Nations 联合国粮食及农业组织
GHG	Greenhouse Gases 温室气体
GSTC	Global Sustainable Tourism Council 全球可持续旅游委员会
IIPT	International Institute for Peace and Tourism 旅游促进和平国际联合会
IMTA	International Mountain Tourism Alliance 国际山地旅游联盟
IUCN	International Union for the Conservation of Nature 世界自然保护联盟
MSME	Micro, Small, and Medium-sized Enterprises 中小微企业
PATA	Pacific Asia Travel Association 亚太旅游协会
PRC	People's Republic of China 中华人民共和国
SDGs	United Nations' Sustainable Development Goals 联合国可持续发展目标
TTDI	Travel & Tourism Development Index 旅行与旅游业发展指数
UK	United Kingdom 英国
UN	United Nations 联合国
UNEP	United Nations Environment Programme 联合国环境规划署
UNESCO	United Nations Educational, Scientific and Cultural Organization 联合国教科文组织
UNWTO	United Nations World Tourism Organization 联合国世界旅游组织
USA	United States of America 美国
VR	Virtual Reality 虚拟现实
WTACH	World Tourism Association For Culture And Heritage 世界文化和遗产旅游协会
WTTTC	World Travel & Tourism Council 世界旅游及旅行业理事会

1

INTRODUCTION AND BACKGROUND

Mount Fuji, Japan
日本富士山

CHAPTER 1

INTRODUCTION AND BACKGROUND

China's renowned philosopher, Confucius saw mountains as symbols of virtue, resilience, and spiritual growth, often using them to illustrate profound life lessons. Here are but a few of his and other ancient Chinese thinkers' wise words concerning the majesty of mountains.

"The wise find joy in water; the virtuous find joy in mountains."

(Original: "知者乐水，仁者乐山。"—Zhī zhě lè shuǐ, rén zhě lè shān.)

"Climbing peaks broadens one's vision; contemplating summits deepens one's virtue."

(Original: "登高使人思远，观山使人思德。"—Dēng gāo shǐ rén sī yuǎn, guān shān shǐ rén sī dé.)

"To reach the high mountain, one must begin with small steps."

(A paraphrase of his teaching on gradual progress: "千里之行，始于足下。"—Qiān lǐ zhī xíng, shǐ yú zú xià.)

This report is written in the spirit of these words; and to explore what makes the mountains of Asia and the Pacific unique to any part of the world.

1.1 About IMTA and PATA



The International Mountain Tourism Alliance (IMTA) is a non-government, non-profit international

organization established with the approval of the State Council of the People's Republic of China, and voluntarily formed by mountain tourism related organizations, groups and individuals. IMTA was formally established on 15 August 2017, with the goal of sustainable tourism, and the mission of protecting mountain resources, preserving mountain civilization, promoting mountain economy to the benefit of the people living in mountainous regions. It is committed to preserving and utilizing mountain tourism resources, participating in the innovative construction of mountain tourism governance systems, facilitating international tourism exchanges and business cooperation, sharing experience of mountain tourism development, and promoting mountain economies and sustainable development.



The Pacific Asia Travel Association (PATA) is a non-profit organization dedicated to promoting responsible and sustainable tourism across the Asia-Pacific region. Established in 1951, PATA connects governments, tourism boards, airlines, hospitality groups, and academic institutions to foster collaboration, provide industry research, and advocate for sustainable tourism practices. Through market intelligence, capacity-building programs, and global events, PATA helps stakeholders navigate industry trends and challenges. PATA plays a crucial role in shaping the future of travel and tourism in the Asia Pacific region, ensuring its growth is resilient, inclusive, and meaningful.

1.2 Objective of the Asia-Pacific Mountain Tourism Development Report

The *Asia Pacific Mountain Tourism Development Report* (hereinafter referred to as "the Report"), jointly produced by the International Mountain Tourism Alliance (IMTA) and the Pacific Asia Travel Association (PATA), aims to provide a comprehensive analysis of global and regional trends shaping the development and sustainability of mountain tourism. The report explores the diverse landscape of mountain tourism destinations, considering their unique topographies, environmental climate, cultural heritage, and product offerings. By identifying both opportunities and constraints in mountain tourism development, the report seeks to inform policymakers, industry stakeholders, and tourism operators on best practices and emerging challenges. It features real-world case studies from across the Asia-Pacific region, showcasing and demonstrating innovative approaches to mountain tourism in action.

1.3 Nature and Scope of the Study

The scope of the study includes a strong focus on leveraging innovative technology, including artificial intelligence (AI), to drive sustainability in

mountain tourism and enhance visitor experiences while preserving fragile mountain ecosystems. The report also highlights lessons learned in the post-COVID-19 era, helping stakeholders adapt to changing market demands and position mountain tourism for long-term resilience and value growth. This report examines the performance and impact of mountain tourism globally and in the Asia-Pacific region, focusing on arrivals, earnings, and job creation. However, the report goes beyond consideration of basic performance indicators to consider whether mountain tourism meaningfully benefits all stakeholders—visitors, host communities, businesses, employees, and the environment—by fostering authentic experiences, cultural exchange, and sustainable development. Unlike traditional tourism metrics that focus primarily on visitor numbers and economic impact, meaningful tourism measures success based on quality, sustainability, and mutual benefit. Balancing the interests of hosts and guests requires community involvement in tourism planning, fair economic distribution, and responsible visitor behavior. The ethos that "a good place to live is a good place to visit" underscores the importance of ensuring that tourism enhances local quality of life, preserves cultural heritage, and protects natural landscapes, making destinations both attractive for visitors and sustainable for residents.



Pamir Plateau Snow Mountain Wetland

1.4 Approach and Methodology

The *Asia Pacific Mountain Tourism Development Report* was implemented over a six-month period, from November 2024 to May 2025, by a team of experts from the IMTA and PATA. The annual statistical report and forecasts produced regularly by PATA and UN Tourism were referenced for global and regional tourism statistics. Meanwhile available published and grey literature was reviewed, and expert consultations were organized with global expert through a webinar activity providing strategic insight. Relevant footnotes are provided throughout the report in addition to a bibliography in Appendix 1.

The project was carried out in two distinct phases, each designed to gather insights and formulate strategic recommendations for the sustainable development of mountain tourism in the region.

Phase 1: Research and Situational Analysis (November 2024 – February 2025)

The initial phase focused on desktop research to review global mountain tourism trends and best practices. This was complemented by an expert webinar held on January 22, 2025, where a panel of specialists discussed opportunities and constraints in mountain tourism development across Asia and the Pacific. The webinar was attended by over 60 participants, whose insights enriched the research process.

The findings from this phase were synthesized into a Situational Analysis addressing the critical questions:

- Where are we now? – Analyzing the current state of mountain tourism in the region.
- Where do we want to go? – Identifying future opportunities and challenges for sustainable development.

Phase 2: Strategy and Action Plan (March – May 2025)

Building on the findings from Phase 1, Phase 2 focused on formulating actionable recommendations to guide the future development of sustainable mountain tourism. The Action Plan addresses the key question:

- How do we get there? – Outlining strategic steps and recommendations for IMTA, PATA, UN Tourism and other tourism organizations to collaborate in

fostering sustainable and resilient mountain tourism in the Asia-Pacific region.

This structured approach ensured that the report was informed by expert knowledge, stakeholder input, and a clear strategic direction for advancing mountain tourism. As previously mentioned, the Report also builds on significant and numerous reports in the areas of mountain tourism and tourism in the Asia-Pacific, further identified in this Report's References and Bibliography.

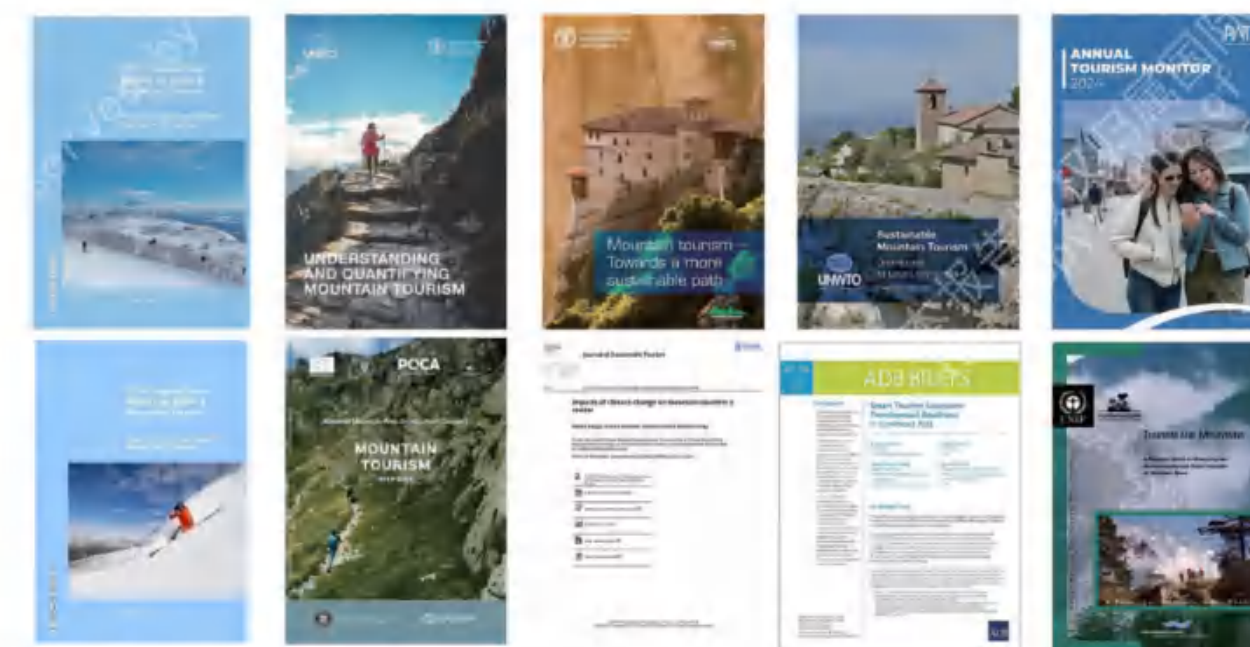


Fig.2 – Prominent Global and Asia Pacific Mountain Tourism Reports Reviewed for This Report

1.5 Organization of the Document

The *Asia Pacific Mountain Tourism Development Report* is divided into three sections, including this Introduction. Chapter Two, the main part of

the report, provides a Situational Analysis, while Chapter Three posits constructive and technical guidance for the development of mountain tourism in the Asia Pacific region.



Fig.1 – Invitation from PATA's Webinar of Experts on Asia Pacific Mountain Tourism

2

SITUATIONAL ANALYSIS

CHAPTER 2 SITUATIONAL ANALYSIS

2.1 Tourism Snapshot 2019-2030

There are a variety of emerging global tourism trends that are transforming global tourism that will undoubtedly affect mountain tourism in the Asia Pacific.

2.1.1 Tourism Performance (Global and Asia Pacific)

Mountain tourism represents a vital segment of global tourism that offers economic benefits to regions worldwide. With its unique appeal, mountain tourism has become a significant contributor to international tourist arrivals, earnings, and employment, particularly in Europe, the Americas, and increasingly so in Asia-Pacific. Mountain tourism accounts for approximately 9% to 16% of international tourist arrivals worldwide. Based on 2021 figures from UNWTO, this translates to as many as 375 million mountain tourists annually. This demonstrates the diverse appeal of mountain destinations, which cater to a variety of interests such as adventure sports, cultural exploration, and ecological tourism. The global mountain tourism industry has demonstrated a healthy annual growth rate of approximately 6.5%. Further highlighting its significance, mountain tourism accounts for up to 15% of global tourism activities.

Regionally, Europe and the Americas has dominated the mountain tourism marketplace, capturing as much as 17% of their international tourism arrivals. Iconic mountain ranges such as the Alps in Europe and the Rockies in North America continue to attract millions of tourists due to their long-established infrastructure, winter sports offerings, and rich

cultural heritage. Asia-Pacific follows closely, with mountain tourism accounting for as much as 17% of the region's international arrivals. Notably, up to 17% of global mountain tourism is concentrated in the Asia Pacific region. Mountain ranges such as the Himalaya, the Southern Alps in New Zealand, and Japan and Indonesia's volcanic peaks have positioned Pacific-Asia as a competitive force in mountain tourism. However, for decades infrastructure development and improved sustainability practices has remained a pernicious challenge and key to realizing the region's full potential of mountain tourism.¹

2.1.1.1 Arrivals

International visitor arrivals reached a record high of 1.5 billion worldwide in 2019, before the disastrous COVID-19 pandemic. In 2020, global arrivals fell to 407 million then rose slightly to 458 million in 2021. This contraction left more than 140 million tourism workers (43%) unemployed and caused export revenues from tourism to fall by 60% compared to the record high (\$1.7 trillion) set in 2019. Following the removal of most travel restrictions, there was a sharp rebound in global arrivals in 2023 and continued upward momentum during 2024. A full recovery to 2019 levels is expected in 2025, when arrivals are forecast to reach 1.5 billion with projected tourism receipts of just shy of \$2 trillion. Key source markets fuelling the global tourism recovery are the People's Republic of China (PRC), which will produce 130 million outbound travellers in 2025 (90% of pre-pandemic levels); the United States of America (USA) will produce 80 million, followed by Germany (40 million), the United Kingdom (UK) and India (30 million). According to UN Tourism's

¹ United Nations Environment Programme & World Tourism Organization (2007). Tourism and Mountains: A Practical Guide to Managing the Social and Environmental Impacts of Mountain Tours. UNEP & UN Tourism, 2007.

long-term forecast, international tourist arrivals are projected to reach 1.8 billion by 2030.

For the Asia Pacific region, PATA forecasts just over 900 million international visitors by 2026 with expenditure nearing an astronomical US\$1 trillion. If domestic tourism movements are included in the calculation, the expenditure value is closer to US\$2 trillion. Of course, regional or global crises would result in more modest arrival numbers by 2027 (Figure 3).

2.1.1.2 Earnings

Overall, mountain tourism constitutes as much as 20% of global tourism revenue. This significant share highlights its critical role in the broader tourism economy. Beyond arrival numbers, mountain tourism destinations generate substantial economic contributions through travel-related earnings. Visitors to mountain regions often participate in high-value activities such as skiing, trekking, and cultural excursions, boosting revenue streams for local businesses. Earnings from mountain

include positions in hospitality, tour operations, and transportation. Indirect employment also thrives, with opportunities in agriculture, handicrafts, and infrastructure development closely tied to mountain tourism demand. For the Asia-Pacific region, this impact is especially pronounced. The rapid growth of tourism in countries like Nepal, India, and Bhutan has provided economic lifelines for mountain communities. The popularity of trekking routes, such as Nepal's Annapurna Circuit, has spurred job creation in guiding, lodging, and ancillary services.

2.1.2 Major Global Tourism Trends and their Impact on Asia Pacific Mountain Tourism

2.1.2.1 Sustainable Tourism and SDGs

UN Tourism defines sustainable tourism as "tourism that takes full account of its current and future economic, social and environmental impacts, addressing the needs of visitors, the industry, the environment and host communities." From a demand perspective, 83% of travelers seek sustainable tourism options and 49% believe there are not enough sustainable travel options available.² Destination management organizations and online travel agents recognize this trend and are increasingly promoting sustainable practices. China has established itself as a global leader in renewable energy technologies, achieving remarkable milestones across various sectors. In 2024, the country installed a record 357 gigawatts of wind and solar power, surpassing its 2030 target of 1,200 gigawatts six years ahead of schedule. This rapid expansion has significantly increased the share of clean energy in China's electricity generation, with renewables accounting for 44% of the power mix, reducing coal's share to a record low of 53%. In the electric vehicle (EV) market, China continues to dominate, with projections indicating that the e-bike market alone will reach approximately 40.2 million units by 2030. These developments underscore China's commitment to leading the global transition toward sustainable energy solutions.

The COVID-19 global pandemic sparked renewed discussions on the future of tourism, emphasizing the need for responsible travel behaviors and adherence to sustainability principles. The rapid expansion of global tourism—growing fivefold between 1980 and 2019—brought both economic benefits and significant challenges. Mass tourism models, such as overcrowded beaches, cruise ship congestion, and all-inclusive resorts, have often diminished the quality of guest-host interactions, eroded cultural authenticity, and strained local resources and environment. In many destinations, this unchecked growth led to declining visitor satisfaction and resistance from host communities.

This period of reflection highlighted the urgent need for a paradigm shift in tourism development. The rise of concerns around "overtourism" has signaled a structural issue within the industry, shifting tourism's image from a provider of joy, jobs, and cultural exchange to one associated with overcrowding, environmental degradation, and loss of identity. In some circles, what was once seen as adventurous global travel is now viewed with a sense of ethical responsibility and even guilt. These trends highlight the need to redefine success in tourism—not just by visitor numbers, but by the quality of experiences, the well-being of local communities, and the preservation of natural and cultural assets.³

By prioritizing a more meaningful form of tourism, the Asia-Pacific mountain tourism sector can embrace a more balanced approach—one that enhances guest-host relationships, supports local economies, and safeguards environmental and cultural integrity. This transformation requires innovative policies, responsible business practices, and a collective commitment to sustainability at every level of the tourism value chain. Meaningful Tourism addresses key shortcomings in existing sustainability frameworks, including Sustainable Tourism,

Forecast of visitor arrivals into Asia Pacific 2025 – 2027 by Scenario

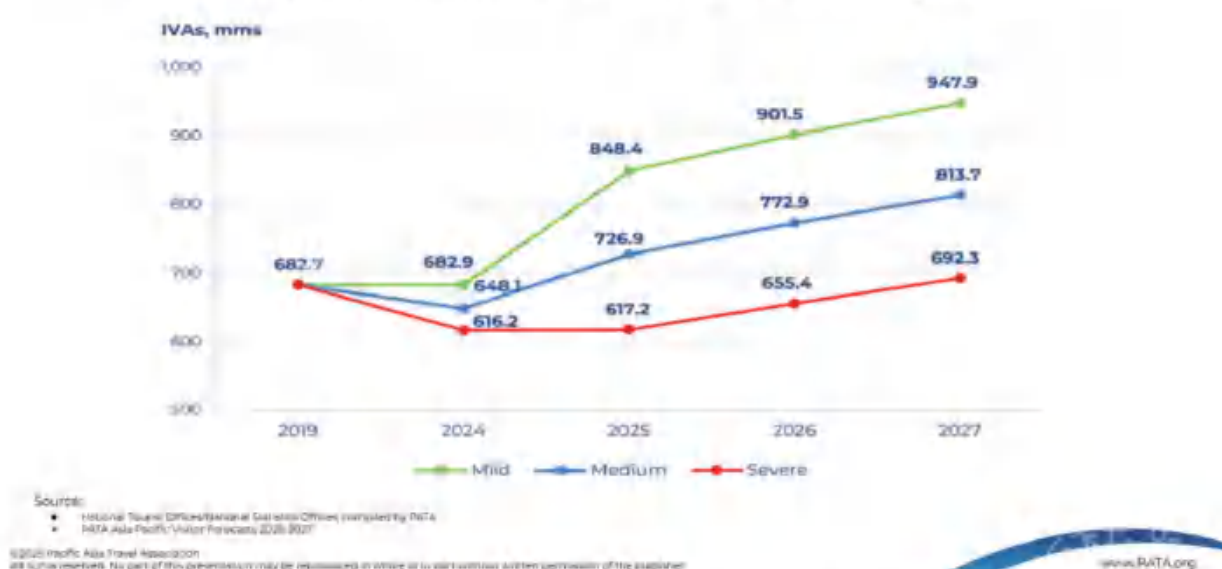


Fig.3 – PATA's Official Forecast of Visitor Arrivals into Asia Pacific for 2025 - 2027

tourism are further augmented by the sector's ability to promote and sell locally produced goods. Handicrafts, artisanal foods, and other cultural products unique to mountain communities appeal to international tourists seeking authentic experiences. This symbiotic relationship between tourism and local industries strengthens rural economies and fosters regional development.

2.1.1.3 Employment

In terms of jobs, the World Travel & Tourism Council (WTTTC) estimates that globally 348 million people were gainfully employed in tourism jobs in 2024, of which 52% (181 million) were in the Asia Pacific region. Mountain tourism serves as a cornerstone of job creation, particularly in remote and rural areas where employment opportunities may otherwise be limited. Jobs directly generated by the sector

² Booking.com (2024). Sustainable Travel 2024.

³ International Mountain Tourism Alliance (2023). Report on Development Trend of World Mountain Tourism.

Responsible Tourism, Regenerative Tourism, Green-Growth Tourism, De-Growth Tourism, Steady-State Tourism, and Circular Economy Tourism. By taking a holistic approach, it integrates Positive Psychology and Positive Sustainability, developing key performance indicators (KPIs) that ensure benefits for all stakeholders—from local communities and businesses to travelers and the environment. This forward-thinking model offers a more inclusive, measurable, and impactful path toward a sustainable future for tourism.

Sustainable tourism in the Asia-Pacific region is increasingly guided by global commitments to the United Nations Sustainable Development Goals (SDGs). Mountain tourism, with its rich environmental, cultural, and social dimensions, presents a unique opportunity to advance sustainability by fostering environmental conservation, poverty alleviation, and cultural preservation. By integrating sustainable practices and aligning with the SDGs, mountain tourism can create a positive impact for both visitors and host communities, ensuring long-term benefits.

Sustainability initiatives online travel agents increasingly showing third-party sustainability certifications across multiple categories, low-emissions destinations, and circular economy systems to reduce, recycle, and eliminate waste. Since 2015, 191 UN Member States have committed to the 2030 Agenda for Sustainable Development and its 17 Sustainable Development Goals. While tourism has the potential to contribute, directly or indirectly to all 17 goals, it is specifically mentioned in Goals 8, 12, and 14 on inclusive and sustainable economic growth, sustainable consumption and production and the sustainable use of oceans and marine resources (Figure 4). In 2023, the UN reaffirmed its commitment to promote tourism as a means of fostering post-pandemic inclusive growth, advocating for strategic policies supporting education, job creation, and gender equality. In 2025, the UN Statistical Commission added global data on tourism employment as an additional indicator to systematically measure and track tourism's contribution to achieving the SDGs. This increases the number of official tourism SDG indicators from two to three, enhancing the recognition of the

sector's global contribution to economic and social progress. The other two tourism indicators measure Tourism Direct Gross Domestic Product (GDP) as a proportion of total GDP and its growth rate, and implementation of standard accounting tools to monitor the economic and environmental aspects of tourism sustainability.⁴

The development of mountain tourism strategies in the Asia-Pacific region reflects a growing emphasis on aligning with SDGs, particularly those focused on environmental sustainability (SDG 13: Climate Action), poverty reduction (SDG 1: No Poverty), and sustainable economic growth (SDG 8: Decent Work and Economic Growth). Tourism stakeholders in the region aim to ensure that the economic benefits of tourism flow directly to local communities while preserving natural resources and cultural heritage. For instance, in Nepal, community-based trekking programs enable local populations to generate income by providing guiding services, accommodations, and food for tourists. These initiatives reduce economic inequalities while promoting the sustainable use of mountain landscapes.



Fig.4 – UN Tourism's 'Tourism for SDGs' Schema



Fig. 5 – SDGs 8, 12 and 13 and Their Link to Tourism

4 UN Tourism (2025). UN adopts new tourism employment indicator to guide efforts towards the SDGs.

SDG #	SDG NAME	SDG FOCUS	MOUNTAIN TOURISM IMPACT	OPPORTUNITIES
8	Decent work and economic growth	Promotes sustainable economic growth, employment, and decent work for all. Targets include: • Achieving full and productive employment for all • Ending modern slavery, trafficking, and child labor • Strengthening the capacity of domestic financial institutions	Mountain tourism fosters job creation in rural and remote areas, reduces regional disparities, and encourages local entrepreneurship. However, challenges include seasonal employment and potential exploitation.	Develop community-based tourism initiatives, promote fair-trade tourism practices, enhance skill-building programs for locals, and establish partnerships with financial institutions to support sustainable tourism-related businesses.
12	Responsible production and consumption	Ensures sustainable consumption and production patterns. Targets include: • Achieving the sustainable management of natural resources by 2030 • Halving per capita global food waste by 2030 • Reducing the release of chemicals and waste into the air, water, and soil • Substantially reducing waste generation by 2030	Mountain tourism, if poorly managed, can lead to overexploitation of natural resources, increased waste, and environmental degradation. However, it also provides opportunities for conservation and promoting eco-friendly practices.	Encourage eco-tourism, implement waste management systems, promote the use of renewable energy, and involve tourists and businesses in conservation projects.
13	Climate action	Takes urgent action to combat climate change and its impacts. Targets include: • Strengthening resilience to climate change-related disasters • Integrating climate change measures into policies and planning • Implementing the UN Framework Convention on Climate Change (UNFCCC)	Mountain tourism is highly vulnerable to climate change, with rising temperatures affecting snow cover, biodiversity, and water resources. At the same time, it offers a platform for raising awareness about climate change impacts.	Promote climate-resilient infrastructure, develop educational tourism initiatives focusing on climate change, and integrate sustainable practices into tourism planning and management to mitigate environmental impact.

Table 1 - Tourism Impacts and Opportunities Linked to SDGs 8, 12 and 13

Case Study

Waste Recycling on Mount Everest (Nepal)

Key Issue

Mount Everest, the world's highest peak, has long been a symbol of adventure and exploration. However, its popularity has come at an environmental cost. Every year, approximately 1,200 climbers and Sherpas attempt to scale Everest, leaving behind significant amounts of trash. It is estimated that over 50 tons of garbage has accumulated on the mountain since the first successful summit in 1953. This includes oxygen canisters, plastic bottles, food packaging, and discarded climbing gear. Annually, the waste generated per climber averages 8-12 kilograms.

On a national scale, Nepal faces challenges with waste management, with urban areas generating approximately 3,200 tons of waste daily, much of which ends up in rivers and open landfills. Everest's waste problem mirrors broader issues, as it highlights the impact of tourism and insufficient infrastructure in handling large-scale waste. The waste left behind on Everest consists primarily of:

- Plastic bottles from water and beverages.
- Food packaging such as foil wrappers and instant noodle containers.
- Climbing gear including abandoned tents, ropes, and oxygen canisters
- Human waste, which adds to environmental and health hazards.

This mix of materials poses significant challenges for disposal and recycling due to their non-biodegradable nature and the difficulty of collecting them from such extreme altitudes.

Solution

To address the waste crisis on Everest, several innovative and sustainable strategies have been proposed and



Fig. 6 – One of Nepal's Mountain Waste Collection Stations (Source: iStock photo)

implemented:

- Climbers are now incentivized to bring waste they generate during their expeditions back to designated collection stations. The Nepalese government requires every climber to bring down at least 8 kilograms of trash upon descent. Those who meet or exceed this quota can earn incentives ranging from \$1-\$3 per kilogram, encouraging compliance and community engagement in the cleanup efforts.
- Collected trash is repurposed into unique products. For instance, discarded oxygen canisters and plastics are transformed into local handicrafts and decorative items. By promoting creative upcycling, the waste is not only removed from the mountain but given a second life.
- Nepal is encouraged to purchase souvenirs crafted locally from upcycled materials. This initiative aims to shift consumer preference from imported souvenirs to eco-friendly, Nepal-made products. Items such as jewellery, art pieces, and home decor serve as tangible reminders of the importance of preserving Everest's ecosystem.
- Employment Opportunities The upcycling initiative fosters employment for local communities, linking livelihoods to sustainable tourism. Craft workshops and small enterprises create income for Nepalese artisans while promoting environmentally responsible practices. These efforts also educate locals on waste management, fostering long-term community engagement.

Similarly, Bhutan's "High Value, Low Impact" tourism model aligns with sustainability goals by limiting tourist numbers and focusing on high-quality experiences that benefit local communities and protect the environment.

Case Study

Mountain Tourism in Bhutan – A Model of Sustainable Development

Bhutan, nestled in the Eastern Himalayas, is a global leader in sustainable tourism, balancing environmental conservation with cultural preservation. Under its "high-value, low-impact" policy, Bhutan ensures responsible tourism through collaboration among the government, private sector, and local communities.

Key Features of Mountain Tourism in Bhutan

- The Tourism Council of Bhutan sets quality standards, while environmental agencies and village cooperatives contribute to decision-making.
- The Snowman Trail, a 25-day trek, crosses 11 high-altitude passes, connecting remote Himalayan villages and showcasing Bhutan's pristine landscapes.
- Strict environmental regulations, including "leave no trace" principles and limited annual trekkers, protect fragile ecosystems.
- Tourism fees contribute to conservation efforts in protected areas like Jigme Dorji and Wangchuck Centennial

National Parks.

Benefits of Sustainable Tourism

- Economic Growth: The Snowman Trail generates income for remote communities, with locals providing homestays, traditional meals, and guide services.
- Cultural Preservation: Visitors experience traditional crafts, festivals, and rituals largely untouched by modernization.
- Environmental Protection: Controlled tourism numbers reduce strain on natural resources, and conservation initiatives help maintain biodiversity.
- Improved Infrastructure: Tourism revenue supports local schools, healthcare, and clean water initiatives.

Challenges and Sustainable Tourism Initiatives

- Logistical Challenges: High altitude and unpredictable weather pose difficulties, requiring collaboration between the government and local communities to maintain safe trekking routes.
- Capacity Building: Bhutan's Tourism Council provides first-aid training for guides and improved trekking gear for porters to enhance safety and sustainability.
- Balancing Growth and Conservation: Bhutan's policies ensure that increased tourism does not compromise environmental integrity or cultural authenticity.

Outcomes and Future Prospects

Bhutan's approach ensures that the Snowman Trail remains an exceptional trekking experience while benefiting the environment and local communities. By maintaining strict tourism regulations and fostering local engagement, Bhutan continues to set a benchmark for sustainable mountain tourism worldwide.



Fig.7 – Bhutan's Snowman Trek (Source: National Geographic and Ben Clark)

2.1.2.2 Climate Change

Globally, over 671 million people—approximately 10% of the world's population—reside in high mountain regions. These communities often depend heavily on mountain tourism for livelihoods, making them particularly vulnerable to external shocks, including climate change, geopolitical instability and technological disruption.

Climate change is an existential threat to tourism destinations and is causing more frequent severe weather events and disasters that disrupt travel patterns. There is already decreasing demand for hotter destinations and more interest in cooler regions—a trend that is expected to accelerate and that will most definitely benefit mountain tourism destinations, particularly in Asia. Destinations that fail to address climate and disaster vulnerability can also expect significantly lower earnings per visitor and negative perceptions about safety.⁵

The Asia-Pacific region, home to some of the world's most iconic mountain landscapes, is increasingly vulnerable to the effects of climate change. From the Himalayas to the Southern Alps, mountain tourism faces significant challenges due to rising temperatures, glacier melt, and more frequent natural disasters. These impacts threaten not only tourism activities but also the ecosystems, infrastructure, and communities that sustain the sector.

Mountain regions in Asia-Pacific are particularly susceptible to climate change due to their fragile ecosystems and reliance on predictable weather patterns. Rising temperatures are accelerating glacier melt, altering ecosystems, and increasing the frequency of natural disasters such as avalanches,

landslides, and floods. The Himalayas, for example, have lost significant glacial mass, impacting water availability and tourism activities dependent on snow and ice. These vulnerabilities not only threaten biodiversity but also undermine the safety and accessibility of popular tourist destinations.⁶

Natural disasters exacerbate these challenges. Events like the 2015 Nepal earthquake demonstrate how long-term declines in tourism can result from disruptions to infrastructure and perceived safety risks. The aftermath of such disasters often paralyzes local tourism-dependent economies for months or even years.⁷

Impact on Winter Mountain Tourism

Winter tourism, a cornerstone of mountain economies, is highly sensitive to climate change. The viability of ski resorts depends on the availability of natural snow, which is declining across the Asia-Pacific region due to rising temperatures. Lower-altitude ski areas are particularly vulnerable, with many already forced to close or operate for shorter seasons. Larger, high-altitude resorts in countries like Japan and New Zealand are better positioned to adapt, employing snow-making technologies to compensate for reduced snowfall. However, these adaptations come at a significant cost, both financially and environmentally, as artificial snow production requires substantial water and energy resources.⁸

Impact on Summer Mountain Tourism

While winter tourism faces declining snow levels,

summer mountain tourism is also being reshaped by climate change. Rising temperatures are making lower-altitude areas less comfortable for summer activities such as hiking and trekking, potentially shifting visitor demand to higher altitudes. However, increased precipitation and extreme

weather events pose risks to infrastructure and tourist safety, including flash floods, unstable trails, and landslides. In some areas, these challenges deter tourists altogether, reducing the viability of summer tourism in affected regions.⁹

Case Study

Heilongjiang Thrives Despite Climate Extremes and Emerging Climate Change Risks

Located in northeast China, with Harbin as the capital, Heilongjiang Province has the country's highest latitude and coldest winters. Often called a "white wonderland," the province is famous for its annual Ski Festival and Ice Festival. With Russian-style architecture, virgin forests, volcanic parks, and northern lights, it attracts visitors seeking both cultural immersion and outdoor adventure. Heilongjiang has some of China's best ski resorts thanks to its long winters and reliable snowfall. Popular ski destinations include:

- **Yabuli International Ski Resort** – China's largest and most prestigious ski resort.
- **Mao'er Mountain Ski Resort** – Ideal for both beginners and experienced skiers.
- **Daqingshan Ski Resort** – Known for scenic beauty and accessible slopes.
- In summer, Heilongjiang's mountains offer hiking and eco-tourism opportunities.



Fig. 8 – Scenery of the Greater Khingan Mountains in China
(Source: ibaotu.com)

5 Food and Agriculture Organization and UNWTO (2021). Mountain Tourism: A More Sustainable Pathway.

6 International Union for Conservation of Nature (2024). Preserving Our Peaks: a call for urgent action to protect mountain ecosystems.

7 Food and Agriculture Organization and UNWTO (2021). Mountain Tourism: A More Sustainable Pathway.

8 International Mountain Tourism Alliance (2024). Mountain tourism destinations responding to climate change.

9 IBID IMTA 2024.

- **Wudalianchi Volcanic Geopark** – With crater lakes and lava formations.
- **Greater Khingan Mountains** – A remote and biodiverse forested region.
- **Mao'er Mountain** – Offers moderate hikes and sweeping views.
- **Phoenix Mountain** – Features dramatic cliffs and mist-covered peaks.
- The capital, Harbin, draws large crowds to its **Ice Festival** and Russian-influenced architecture.

Key Issue or Challenge

Heilongjiang's mountain tourism faces complex challenges. Harsh winters, with temperatures dipping below -30°C , can overwhelm unprepared tourists. Snow and ice cause seasonal road closures and safety concerns. Climate change adds new risks: shorter winters, unpredictable snowfall, and increased freeze-thaw cycles threaten ski seasons and infrastructure. Summer activities are constrained by limited warm periods. Remote areas like the Greater Khingan Mountains also face climate-induced wildfire risks and continued infrastructure limitations, including sparse transport links and emergency services. Despite facilities at Yabuli, many rural destinations still lack consistent visitor amenities and multilingual support.



Fig. 9 – Harbin Ice Festival (Source: pexels.com)

Existing Solutions

Authorities are improving infrastructure and adapting to climate extremes. Heated shelters, winter gear rentals, and cold-weather safety training are standard in major hubs. New rescue protocols, avalanche risk assessments, and smart monitoring help mitigate climate-related hazards. Road upgrades, safer walkways, and weather alerts improve access. To boost summer tourism, local governments are promoting mountain biking, rafting, foliage tours, and geothermal hot spring resorts, shifting toward four-season tourism models. Accessibility continues to improve through high-speed rail, regional airports, and expanded expressways. Tourist shuttles and electric buses offer eco-friendly mobility. Cold-weather transport solutions include snow tunnels, snowmobiles, and alternate air routes. Tourism infrastructure now includes eco-lodges, glamping sites, and bilingual support. Smart services like AI translators and cashless systems enhance accessibility. Health and safety measures include telemedicine, helicopter evacuations, and climate-resilient clinics in remote regions.

Future Potential

Despite growing climate risks, Heilongjiang's Mountain tourism has high potential. Investments in climate-resilient infrastructure and diversification strategies are enabling the province to remain a national hub for winter and adventure sports. Four-season tourism is expanding, with hot spring retreats and summer eco-tourism complementing winter activities. Smart tourism tools and sustainable practices are enhancing visitor experiences. With improved connectivity and climate adaptation, Heilongjiang is well positioned to thrive as a year-round mountain tourism destination, even in a changing climate.

Effects on Mountain Ecosystems and Biodiversity

Climate change is altering the delicate balance of flora and fauna in mountain ecosystems. Rising temperatures and reduced snow cover are driving the spread of invasive species, displacing native plants and animals. For example, alpine ecosystems in the Himalayas are facing significant biodiversity loss, threatening species that depend on specific climate conditions. Glacier melt, a critical concern in Asia-Pacific, affects not only water availability but also ecosystem stability. As freshwater sources diminish, conflicts between wildlife and human populations are likely to increase, further straining the sustainability of mountain tourism.

Natural Disasters and Infrastructure Damage

The increased frequency of climate-induced natural disasters, including landslides, glacial outburst floods, and permafrost thaw, poses significant risks to mountain tourism infrastructure. Popular hiking routes, bridges, and lodges are becoming less stable, requiring frequent repairs or rerouting. These disruptions increase the costs of maintaining tourism infrastructure and reduce visitor numbers due to safety concerns. In regions like Nepal, infrastructure damage has already resulted in economic losses and

reduced accessibility to key tourist destinations.

Challenges for Local Communities

Climate change also poses economic challenges for mountain communities in Asia-Pacific. Reduced snowfall, frequent natural disasters, and the degradation of natural resources are threatening traditional livelihoods in agriculture and tourism. Communities that depend on mountain tourism must adapt to these changes or face economic decline. In some cases, adaptation may require transitioning to alternative income sources, which can be difficult without access to resources, training, and infrastructure. For some communities, relocation may become the only viable option, leading to cultural displacement and loss.

Water Scarcity and Resource Strain

Glacier melts and seasonal precipitation imbalances are creating water scarcity in mountain regions. This impacts both local communities and tourism activities, particularly in areas that rely on snow-dependent sports or freshwater for visitor use. Ski resorts increasingly turn to artificial snow production to sustain operations, further straining limited water resources. In many areas, these competing demands exacerbate tensions between tourism and local needs, highlighting the importance of sustainable water management practices.

"A good place to live is a good place to visit"

- Attributed to Brent Toderian, former Chief Planner for Vancouver, Canada

2.1.2.3 Overtourism

As tourist numbers have risen globally in the aftermath of the Pandemic, overtourism is a renewed concern. While destinations welcome the jobs and income tourism brings, many cities and fragile heritage sites are overly congested and unable to cope with additional demand for waste collection and treatment, water supply and wastewater treatment, and other public services. Management responses include limiting visitor numbers, requiring advance reservation and timed entry to popular attractions, and imposing higher fees and taxes to soften demand and mitigate the negative environmental and social externalities that can be caused by overtourism.¹⁰ PRC is leading the way in developing technology solutions to manage overtourism, which has been a challenge from the onset of modern tourism given the country's massive population of 1.4 billion people and the high propensity for domestic travel.



Fig. 10 – Overtourism (Source: IMTA)

The Asia-Pacific region, home to diverse and breathtaking mountain landscapes, faces growing challenges from overtourism. As the popularity of mountain destinations rises, the strain on fragile ecosystems, cultural heritage, and local infrastructure becomes increasingly apparent. This section explores the environmental and cultural impacts of overtourism in the region and emphasizes the need for sustainable solutions. Mountain ecosystems are particularly sensitive to tourism-related activities, and overtourism exacerbates environmental damage. Increased tourist numbers lead to overuse of natural resources, habitat destruction, and pollution from transportation, accommodations, and visitor activities. Litter and waste management are significant concerns in popular destinations such as Nepal's Everest Base Camp and Japan's Mount Fuji, where high visitor volumes result in an accumulation of non-biodegradable waste. The loss of biodiversity, caused by the disruption of habitats and the introduction of invasive species, further threatens the ecological balance of these regions.¹¹

Overtourism in mountain regions also impacts the cultural fabric of local communities. The influx of visitors can overwhelm infrastructure and disrupt traditional practices, diluting the authenticity of local cultures. In regions such as Bhutan and Nepal, where indigenous traditions and customs play a central role in daily life, the rapid expansion of tourism can erode cultural heritage and identity. Local festivals and sacred sites are often commercialized to meet tourist expectations, reducing their cultural significance.

Recognizing the adverse effects of overtourism has led to increased awareness of the need for conservation in mountain destinations. Early conservation initiatives by organizations such as the

Alpine Club and the Sierra Club set a foundation for sustainable tourism practices. In Asia-Pacific, similar efforts have gained momentum, with countries like Bhutan implementing strict tourism policies to minimize environmental impact. Bhutan's "High Value, Low Impact" strategy, for instance, restricts tourist numbers while emphasizing quality over quantity, ensuring that tourism benefits both the environment and local communities.

The late-20th century saw a global shift toward sustainable tourism in response to growing concerns about overtourism. In Asia-Pacific, destinations are increasingly adopting eco-friendly and regenerative tourism practices to mitigate overtourism's impact. Examples include New Zealand's emphasis on eco-tourism and community-based tourism (CBT) in India's Himalayan regions. Such initiatives focus on reducing resource consumption, preserving cultural and natural heritage, and ensuring that local communities benefit economically.

2.1.2.4 Culture and Community

Mountain tourism in the Asia-Pacific region provides a unique platform for cultural and community engagement. It offers opportunities to showcase and preserve local traditions while fostering economic benefits. However, this form of tourism also poses challenges to communities, requiring a delicate balance between development and sustainability. This section explores the cultural and community issues associated with mountain tourism in the region, highlighting its benefits and drawbacks. Community-based tourism (CBT) in the Asia-Pacific region fosters direct interaction between tourists and local communities. Activities such as learning traditional cooking methods, creating handicrafts, and participating in farming practices allow visitors to experience authentic mountain cultures. This approach provides local communities

with a sustainable source of income while preserving traditional skills and knowledge. For example, homestay programs in Nepal's mountain regions enable tourists to immerse themselves in local lifestyles, contributing directly to the household incomes of host families. Similarly, eco-villages in Indonesia's mountain regions integrate tourism with sustainable agriculture and local crafts, creating a symbiotic relationship between visitors and residents. However, the success of CBT hinges on careful planning to avoid the over-commercialization of traditions, which can dilute cultural authenticity.

The World Tourism Association for Culture and Heritage (WTACH) is a global organization dedicated to preserving and promoting cultural heritage within the tourism industry. It advocates for responsible and sustainable tourism practices that protect the integrity of cultural sites and traditions while benefiting local communities. By fostering collaboration between governments, businesses, and cultural organizations, WTACH ensures that tourism enhances rather than depletes the world's rich cultural heritage.¹² In Bhutan, traditional festivals, handicrafts, and cuisine are promoted as key elements of the tourism experience. Similarly, Japan's mountain regions preserve their unique cultural identity through practices such as traditional farming, religious rituals, and historical preservation. These initiatives not only enhance the cultural richness of mountain tourism but also ensure that local traditions are safeguarded for future generations.

The Asia-Pacific mountain regions are rich in folk art traditions that reflect the diversity of local cultures. Tourism focused on folk art allows visitors to engage with artisans, learn about their crafts, and purchase authentic products, increasing the income of residents, supporting the local economy. This type of tourism also fosters cultural exchange and

¹⁰ National Geographic, 2023. What's the Problem with Overtourism.

¹¹ International Mountain Tourism Alliance (IMTA) (2024). Mountain tourism destinations responding to climate change.

¹² www.wtach.org

appreciation. For instance, in India's Himalayan regions, traditional weaving and painting practices have gained global recognition through cultural tourism initiatives. In Bhutan, local artisans benefit from programs promoting their crafts to international visitors, ensuring the survival of these art forms. However, increased demand for cultural products can sometimes lead to mass production, reducing the quality and originality of traditional crafts.

In some cases, mountain tourism has played a pivotal role in revitalizing traditional industries, performing arts, and culinary traditions in Asia-Pacific. For example, Bhutan's focus on cultural tourism has reinvigorated local festivals, attracting both domestic and international tourists while preserving intangible cultural heritage. Similarly, Nepal's promotion of mountain music and dance has provided a platform for local artists, creating economic opportunities and fostering pride in their cultural identity. However, these benefits can come with drawbacks, such as the risk of cultural commodification, where traditions are altered to suit tourist preferences. This can undermine the authenticity and intrinsic value of cultural heritage over time.

2.1.2.5 Rapid Digitalization, including Artificial Intelligence

Digital technologies transform the way destinations gather data, access markets, offer products and services, and facilitate travel. Online travel agents, mobile applications, social media, and digital payment systems are ubiquitous, and their global reach offers tremendous business opportunities for tourism destinations and enterprises. Digital platforms offering alternative accommodations or mobility services help small-scale entrepreneurs connect to the tourism economy. With PRC leading the pack, online sales comprised 63% of travel and tourism transactions and are increasing by 8% per year with the global online travel market expected to

be worth nearly \$1 trillion per year in 2030.¹³ Apart from their commercial benefits, digital tools can be used to help destination management authorities better regulate visitor flows, monitor environmental conditions, and efficiently collect tourism taxes and fees.

The Asia-Pacific region is experiencing a rapid digital transformation in its mountain tourism sector, driven by the integration of advanced technologies such as artificial intelligence (AI), Big Data analytics, and mobile applications. These digital tools are reshaping the industry by enhancing visitor experiences, improving destination management, and addressing challenges such as overtourism. However, the uneven pace of digital adoption, particularly in rural mountain communities, poses significant obstacles to realizing the full potential of these innovations.

Digital tools are becoming integral to mountain tourism management in the Asia-Pacific region. Mobile apps, for instance, provide real-time information on weather, trail conditions, and local attractions, enabling tourists to plan their visits more effectively. Big Data analytics offers valuable insights into visitor behaviors and preferences, allowing destination managers to optimize resource allocation and improve services.

For example, New Zealand leverages digital platforms to promote eco-friendly travel in its mountainous regions, guiding tourists toward sustainable practices. Similarly, Japan employs data-driven solutions to monitor tourist flows at Mount Fuji, ensuring better crowd management and infrastructure planning. These technologies contribute to enhanced tourist satisfaction while mitigating the environmental and social impacts of tourism.

AI-powered solutions are increasingly being used to address complex challenges in mountain tourism. Smart tourism technologies, including AI-driven chatbots and automated reservation systems, enhance the convenience and accessibility of tourism services. Virtual assistants can provide personalized recommendations for activities, accommodations, and dining options, improving the overall visitor experience. In South Korea, smart tourism technologies are employed to manage popular mountain destinations, using AI algorithms to predict visitor numbers and allocate resources accordingly. Additionally, AI-based image recognition tools help monitor environmental changes, such as deforestation or snow cover variations, which are critical for sustainable tourism management.

2.1.2.6 Bridging the Urban-Rural Digital Divide

Despite its potential, the adoption of digital technologies in Asia-Pacific mountain tourism is hindered by the urban-rural digital divide. Many rural mountain communities lack the infrastructure, connectivity, and digital skills necessary to implement and benefit from advanced technologies. Limited access to high-speed internet and inadequate training

programs for local stakeholders are significant barriers to inclusive digital transformation. In countries like Nepal and Bhutan, where rural communities rely heavily on tourism for their livelihoods, this divide limits their ability to compete in an increasingly digitalized industry. Addressing these disparities requires targeted investments in digital infrastructure, capacity-building programs, and partnerships with technology providers to ensure equitable access to digital tools.

2.1.2.7 Traveller Types and Tourism Demand Shifts

The Asia-Pacific region is renowned for its diverse mountain landscapes, attracting a wide range of tourists with varied motivations and preferences. From thrill-seekers to cultural explorers, the region's mountain tourism caters to a spectrum of travel styles and interests. Over recent years, evolving trends in travel demand have significantly influenced the types of tourists visiting mountain destinations, reshaping tourism offerings to meet these changing expectations. This section explores the primary types of mountain tourists, and their corresponding tourism demands in Asia-Pacific.¹⁴



¹³ SkyQuest. 2023. Online Travel Booking Services Market Insights.

¹⁴ Amadeus (2023). Amadeus Tribes 2033 Report.



Fig. 11 – Major Mountain Tourism Experiences and Activities

Types of Mountain Tourists



Fig. 12 – Sightseers (Source: pexels.com)

Sightseers

Sightseers represent a significant segment of mountain tourists, motivated by the awe-inspiring landscapes of the region. These visitors primarily focus on viewing and photographing scenic vistas, such as the Himalayan ranges, Japan's Mount Fuji, or the Southern Alps of New Zealand. They typically prefer accessible destinations and short-duration visits, often relying on guided tours or transportation services like cable cars.



Fig. 13 – Family and leisure tourists (Source: pexels.com)

Family and Leisure Tourists

Family and leisure tourists prioritize relaxed, inclusive experiences that cater to all age groups, favoring destinations with family-friendly attractions such as scenic parks, cable car rides, or gentle walking trails. For example, Malaysia's Cameron Highlands are popular with families seeking leisurely mountain retreats.

Mountain Sports Enthusiasts

This group includes both seasoned adventurers and amateurs drawn to the excitement of mountain sports. Activities like hiking, rock climbing, skiing, snowboarding, and mountain biking are central to their travel motivations. Destinations such as Nepal's Annapurna Circuit and Japan's ski resorts in Hokkaido cater specifically to these enthusiasts, offering tailored services.



Fig. 14 – Mountain Trail Running (Source: pexels.com)



Fig. 15 – Eco-Education Travelers (Source: pexels.com)

Nature Tourists

Nature tourists are often scholars, students, or eco-tourists interested in exploring and understanding the natural environment. They engage in fieldwork, ecological studies, and wildlife observation. Protected areas like Bhutan's Jigme Dorji National Park and Indonesia's mountainous forests are popular with this niche group. Included in this category in the Asia-Pacific will be tourists seeking to see volcanoes and other geological features within the 'Ring of Fire'.

Mountain Cultural Explorers

Cultural explorers seek to engage deeply with local communities and traditions. Their travel experiences are centered around festivals, local crafts, and indigenous practices. Destinations like Bhutan, known for its preserved traditions, and Nepal's rural villages attract these tourists.



Fig. 16 – Mountain Cultural Explorers (Source: pexels.com)



Fig. 17 – Mountain Forest Yoga Experience (Source: ibaotu.com)

Mountain Wellness Travellers

Wellness travelers focus on achieving physical and mental well-being in tranquil mountain settings. Activities such as yoga retreats, meditation, and holistic therapies are common among this group. Destinations like India's Himalayan yoga centers and Bali's mountain retreats cater specifically to their needs.

Authentic Experience Seekers

These travelers prioritize originality and authenticity, opting for local accommodations such as bed-and-breakfasts or homestays. They value immersive experiences, such as participating in traditional farming or handicraft workshops, often in lesser-known mountain areas.



Fig. 18 – Mountain Homestay Tourists (Source: pexels.com)

Conservation Advocates

This group is motivated by environmental sustainability and conservation. They actively seek destinations that promote eco-friendly practices and are often involved in volunteering or supporting local conservation projects. For example, tourists participating in reforestation programs in Nepal or wildlife conservation efforts in Malaysia's mountain reserves are typical representatives of this group.



Fig. 19 – Ecological Protection Action (Source: pexels.com)

Case Study

Highly Accessible Volcano Tourism at Mount Yasur, Vanuatu

Mount Yasur, located on Tanna Island in Vanuatu, is one of the most accessible and active volcanoes in the world. Known for its near-constant strombolian eruptions, the volcano has become a major attraction, drawing thousands of international and domestic tourists each year. Its fiery displays offer a unique and unforgettable experience, making it a cornerstone of Vanuatu's tourism industry.

Key Features of Mount Yasur Tourism

- Mount Yasur is highly accessible compared to many other active volcanoes. Visitors can approach the summit by vehicle, with only a short hike required to reach the rim.
- The Tanna Island airport provides relatively easy access via domestic flights from Vanuatu's capital, Port Vila.
- The volcano is sacred to the local Ni-Vanuatu people and is deeply embedded in their spiritual and cultural practices.
- Visitors often have opportunities to engage in cultural experiences, such as traditional dances and ceremonies, offered by local communities near the volcano.

Benefits of Mount Yasur Tourism

- Tourism to Mount Yasur is a vital economic driver for Tanna Island. Local communities benefit from employment opportunities in guiding, transportation, and hospitality.
- Small businesses, such as handicraft vendors and local restaurants, thrive due to the influx of tourists.
- Tourism has provided an incentive to preserve and share traditional practices. Many visitors come not only for the volcano but also to experience the unique culture of the island.



Fig. 20 – Yasur Volcano (Source: IMTA)

- Visitors gain insight into the dynamic natural environment of Tanna Island, fostering a greater appreciation for the Earth's geological activity.

Challenges

- The increase in foot traffic and vehicle use near Mount Yasur has raised concerns about environmental degradation and erosion.
- Balancing tourism with conservation efforts is an ongoing challenge
- Mount Yasur's eruptions, while generally predictable, can pose risks to tourists if activity intensifies unexpectedly
- A growing number of visitors can strain local resources and disrupt traditional ways of life. Managing visitor numbers sustainably is essential to prevent overtourism.

Initiatives for Sustainable Tourism

- Local communities are directly involved in managing tourism activities, ensuring they benefit from the economic opportunities.
- Many guides are locals who share their knowledge and stories, enhancing the visitor experience.
- The Vanuatu government and local authorities have implemented safety and environmental regulations, such as controlled access and activity monitoring.
- Efforts are being made to promote eco-friendly tourism, including waste management and minimizing the carbon footprint of tours.

Outcomes and Future Prospects

Tourism to Mount Yasur has solidified Tanna Island's position as a must-visit destination in the Pacific. The volcano continues to attract adventurous travelers, photographers, and those intrigued by natural wonders. However, to sustain this momentum, it is vital to address challenges through collaborative efforts between the government, local communities, and the tourism industry.

2.1.2.8 Crisis Communication and Destination Resilience

In the Asia-Pacific region, renowned for its susceptibility to natural disasters such as earthquakes, typhoons, and tsunamis, the integration of crisis communications and resilience in tourism is paramount. Effective crisis communication serves as a cornerstone of resilience, enabling destinations to manage information dissemination, maintain public trust, and expedite recovery processes. The UN

Tourism's Toolbox for Crisis Communications in Tourism emphasizes the necessity of preparedness, timely communication, and stakeholder coordination to mitigate the adverse effects of crises. By implementing these strategies, tourism-dependent economies in the Asia-Pacific can enhance their resilience, ensuring swift recovery and sustained growth in the aftermath of natural disasters.¹⁵

Developing a mountain tourism-specific toolbox

for crisis management will improve resilience as the external environment becomes increasingly unpredictable. Mountain destinations face unique challenges, including extreme weather conditions, natural disasters such as avalanches, landslides, and earthquakes, and the impacts of climate change on ecosystems and tourism infrastructure. Unlike urban tourism, mountain tourism often involves remote locations, limited emergency response capacities, and a strong reliance on natural assets, making proactive crisis planning even more critical.

A dedicated toolbox would provide tailored risk assessment frameworks, early warning systems, and crisis communication strategies that account for the geographical, environmental, and infrastructural constraints of mountain tourism. It could incorporate good practices from past crises, facilitate cross-border cooperation, and promote the use of technology, such as AI-powered weather prediction, satellite-based monitoring, and digital platforms for real-time tourist safety alerts. By equipping stakeholders—including local communities, tourism operators, and policymakers—with specialized guidance, a mountain tourism crisis management toolbox would help minimize disruptions, enhance recovery efforts, and strengthen the long-term sustainability of these fragile yet economically significant destinations.

2.1.2.9 Tourism for Peace and People to People Exchange

By emphasizing the linkage between culture and tourism, PRC exemplifies how tourism can foster harmonious relationships between people, cultures and nations. The emphasis on peaceful people-to-people exchanges through initiatives like the Belt and Road Initiative (BRI) underscores tourism's potential as a platform for global peace and mutual understanding. The BRI, while primarily an economic and infrastructure-driven initiative,

also fosters deeper cultural exchanges, educational cooperation, and tourism partnerships between China and the world. By connecting nations through travel, trade, and shared cultural experiences, China's approach aligns with the fundamental belief that tourism should serve a higher purpose beyond profit and leisure—it should be a catalyst for intercultural interaction that builds bridges across people, faiths, and ethnicities.

The International Institute for Peace through Tourism (IIPT) is a global non-profit organization dedicated to promoting tourism as a force for peace and sustainable development. Founded in 1986, IIPT advocates for responsible travel practices that foster international understanding, cultural exchange, environmental stewardship, and poverty alleviation. The organization has spearheaded numerous initiatives, including the Global Peace Parks Project, the IIPT Credo of the Peaceful Traveler, and partnerships with UN agencies and tourism stakeholders worldwide. By emphasizing tourism's role in healing wounds of conflict, bridging cultural divides, and advancing the SDGs, IIPT continues to champion the idea that "Every traveler is potentially an ambassador for peace."¹⁶

Voluntourism, which combines travel with meaningful volunteer work, plays a vital role in fostering sustainable development and conservation in mountain tourism. In the Asia-Pacific region, one notable example is the Great Himalayan Trail conservation program in Nepal. This initiative allows travelers to actively participate in reforestation efforts, waste management projects, and community development programs (e.g., school and electricity) while trekking through the region's breathtaking landscapes. By engaging directly with local communities and environmental conservation efforts, voluntourists contribute to protecting fragile ecosystems, preserving cultural heritage, and supporting

¹⁵ UN Tourism. 2012. Toolbox for Crisis Communications in Tourism.

¹⁶ www.peacetourism.org

sustainable livelihoods. Such programs exemplify how voluntourism can transform travel into a purpose-driven experience, fostering deeper connections between visitors and the destinations they explore.

2.1.3 Future Forecasts to 2030

The global mountain tourism industry is expected to experience significant long-term growth, with annual growth rates for tourists and revenues projected at 6.5% and 10%, respectively, from 2024 to 2026. By 2026, the industry is expected to reach 1.474 billion tourists and generate USD 1.82 trillion in revenue. Following the global recovery from the COVID-19 pandemic, regions like Asia-Pacific, North America, and Europe are leading in economic recovery, which also drives the tourism sector. The global tourism industry is forecasted to exceed pre-pandemic international tourist arrivals by the end of 2025. Emerging economies are projected to experience faster growth in mountain tourism compared to advanced economies, with an average annual increase of 4.4% versus 2.2%, respectively, between now and 2030.

There are several key trends emerging to 2030 across different destinations and activities in mountain tourism. For example, the ski industry in traditional markets such as Western Europe and North America faces challenges like aging populations and stagnant incomes, limiting new developments. However, emerging markets in Eastern Europe, Central Asia, and the Pacific hold growth potential due to their developing infrastructure, although these regions face uncertainty. In Australia, ski seasons are projected to shorten by one-third by 2030, even with significant reductions in greenhouse gas emissions. This trend may lead to a decline of 16–18 days in ski season length by the 2030s, affecting resorts like Ben Lomond and Mount Baw Baw. To mitigate

the effects of shorter ski seasons, mountain resorts are diversifying into year-round tourism offerings, including hiking, mountain biking, and cultural experiences, to maintain visitor numbers and economic stability.

The future of wellness tourism in mountain regions is expected to focus on eco-friendly initiatives, integrating high technology for personalized wellness experiences, and emphasizing holistic therapies that connect mind, body, and spirit. Cultural immersion and traditional therapies will also play a key role in attracting wellness tourists. There is a growing focus on regenerative tourism, which aims to not only sustain but also improve the natural and cultural environments of mountain regions. This approach emphasizes community involvement, responsible outdoor activities, and the development of eco-friendly infrastructure.¹⁷

Technological advances will increasingly shape the future of mountain tourism, including virtual and augmented reality for immersive experiences, smart infrastructure for resorts, and data-driven solutions to enhance visitor management and sustainability. The adoption of digital platforms for booking and virtual tours is increasing, with online bookings accounting for 25% of mountain and snow tourism reservations in 2022. This trend is expected to grow as travelers seek convenient planning options emphasizing a vision for sustainable tourism, focusing on low-impact travel experiences and green infrastructure, aiming for a zero net operating footprint by 2030. Despite the importance of mountain tourism, data on its size and impact remain scarce, highlighting the need for improved data collection and analysis to inform sustainable development and policy decisions.¹⁸

2.2 Asia-Pacific Mountain Tourism Destinations

Asia and the Pacific encompass a vast and diverse mountainous landscape, from the towering peaks of the Himalaya, home to the world's highest summits, to the volcanic ranges of the Pacific Ring of Fire, where seismic activity shapes dramatic mountain formations across Indonesia, Japan, and beyond. This diverse geography of the Asia-Pacific gives rise to a wide range of climates, from the frigid, snow-covered alpine environments of the Himalaya to the warm, humid, and tropical mountain ecosystems found in regions like Timor-Leste and Vanuatu. It is this resource endowment as the foundation for the development of tourism destinations that has given rise to a long tradition of mountain tourism in the Asia-Pacific.

2.2.1 History of Asia-Pacific Mountain Tourism

Mountains have long held divergent cultural meanings in Western and Eastern traditions. In the West, mountains have often been seen as challenges to overcome, reflecting an ethos of conquest and human dominance over nature. This perspective is exemplified by the tradition of mountaineering, where reaching the summit is the goal. Conversely, in many Asian cultures, mountains are sacred spaces to be revered, embodying spiritual significance, harmony, and a deep connection with nature. For example, in China, Japan, and the Himalayas, mountains are often seen as the abodes of gods, sites of pilgrimage, and sources of wisdom rather than obstacles to be conquered. This contrast is well captured by the Japanese alpinist Kenichiro Matsuoka, who noted, "In the West, people climb mountains because they are there. In the East, we are with the mountains because they are there." This



Fig. 21 – Mount Fuji in Japan (Source: pexels.com)



Fig. 22 – Mount Everest (Source:pexels.com)



Fig. 23 – Tanggula Mountains (Source: IMTA)



Fig. 24 – Mount Bromo, Indonesia (Source: IMTA)

¹⁷ International Mountain Tourism Alliance (2023). Report on Development Trend of World Mountain Tourism.

¹⁸ Future Market Insights (2022). Snow and Mountain Tourism Sector Overview and Outlook.

fundamental difference in perception shapes the approach to mountain tourism in Asia and the Pacific, emphasizing preservation, spirituality, and coexistence over dominance and conquest.

The history of tourism to mountain areas in the Asia Pacific region is a fascinating narrative shaped by geography, culture, and socio-economic developments. Spanning centuries, it reflects how the allure of majestic peaks, spiritual significance, and the promise of adventure have drawn travelers from near and far. The roots of mountain tourism in the Asia Pacific can be traced back to ancient times when mountain regions were revered as sacred spaces. Many cultures in Asia considered mountains as abodes of gods or places of spiritual enlightenment. For instance, the Himalayas, often referred to as the "abode of snow," have been central to Hinduism, Buddhism, and Jainism. Mount Fuji, an iconic peak in Japan, holds spiritual significance in Shintoism and Buddhism. As early as the 7th century, pilgrims climbed Fuji's slopes to seek purification and spiritual connection. Similarly, Mount Kailash in the Himalayas attracted pilgrims from India, Nepal, Tibet, and beyond. Its reputation as a holy site—believed to be the earthly manifestation of Mount Meru—ensured a steady stream of pilgrims for centuries.

With the rise of European colonial powers in Asia during the 18th and 19th centuries, mountain tourism began to take on a new form. Explorers, naturalists, and surveyors ventured into mountain regions, mapping the terrain and documenting the flora and fauna. The Himalayas became a focal point for British expeditions. The establishment of hill stations like Shimla, Darjeeling, and Nuwara Eliya by the British colonial administration served dual purposes: providing a cool retreat from the tropical heat and facilitating scientific exploration. These hill stations soon evolved into leisure destinations for the colonial elite, blending the exploration of mountain landscapes with recreational activities. The development of infrastructure, such as roads and

railways, facilitated access and laid the foundation for future tourism. In Southeast Asia, colonial influence similarly spurred interest in mountain regions. For example, Malaysia's Cameron Highlands became a popular retreat, offering respite from the tropical lowlands. Tea plantations established by the British added an agricultural dimension to the scenic charm of these highlands.



Fig. 25 – Humans Summited Mount Everest for the First Time (Source: Pinterest)

The 20th century marked the emergence of mountaineering as a popular activity, particularly in the Himalayas. Expeditions to conquer peaks like Mount Everest captured global attention. Sir Edmund Hillary and Tenzing Norgay's successful ascent in 1953 was a milestone that catalyzed international interest in Himalayan mountaineering. Mountaineering clubs and organizations flourished, and mountain tourism began to attract not just seasoned climbers but also amateur adventurers. Nepal, with its breathtaking landscapes and accessibility to several peaks over 8,000 meters, became a hub for trekking and climbing. The establishment of trekking routes like the Annapurna Circuit and Everest Base Camp trek further enhanced its appeal. Japan also saw a surge in mountain tourism during this period, with the Japanese Alps and Mount Fuji drawing domestic and international visitors. Activities like skiing, introduced in the early 20th century, transformed mountain areas into year-round destinations.



Fig. 26 – Bhutan Mountain Community (Source: ibaotu.com)

The post-World War II economic boom in many Asia Pacific countries fueled domestic tourism. Improved

infrastructure, rising incomes, and greater leisure time allowed more people to explore mountain areas. Japan's Shinkansen (bullet train) made remote regions more accessible, while new airports and highways in countries like China and India opened up mountainous regions to broader audiences. In the late 20th century, mountain tourism expanded further with the growth of eco-tourism and sustainable travel. Countries recognized the need to balance tourism with conservation, particularly in ecologically sensitive areas like Bhutan's highlands or the tropical mountain forests of Papua New Guinea. Bhutan's "high-value, low-impact" tourism policy exemplifies this approach, limiting the number of tourists to preserve its cultural and natural heritage.

ASIA-PACIFIC MOUNTAIN TOURISM TYPOLOGY

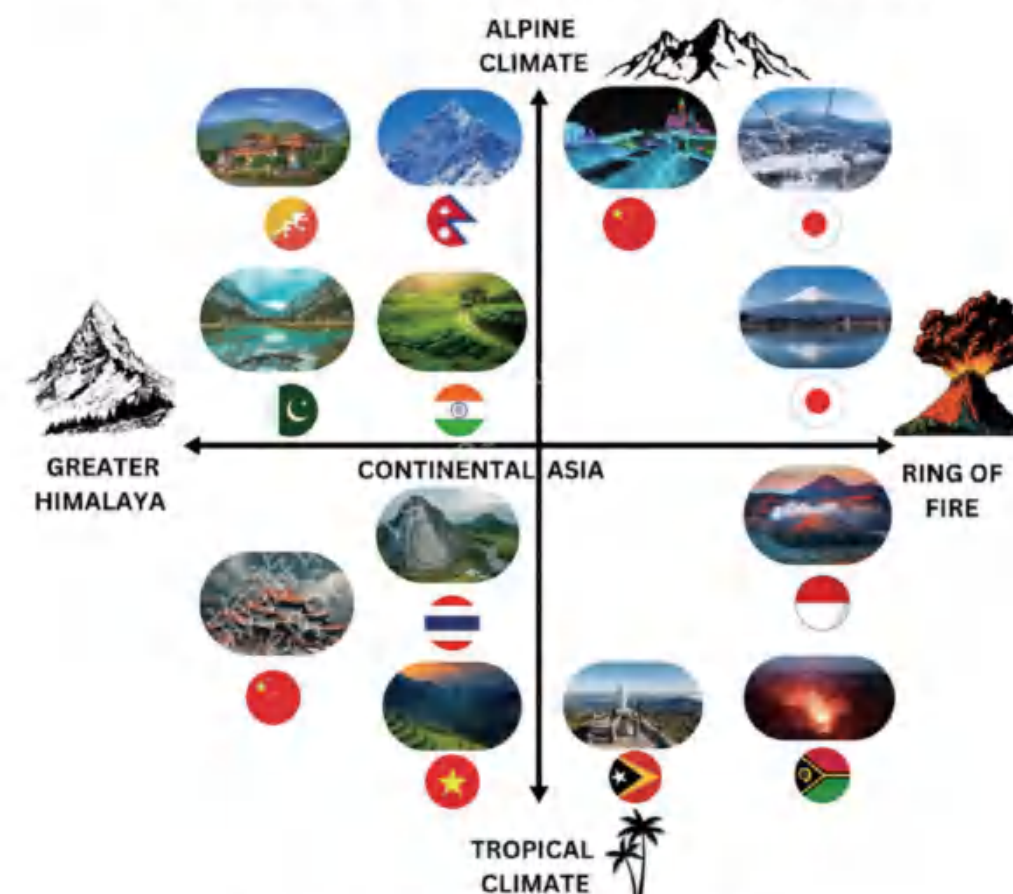


Fig. 27– A Typology of Mountain Tourism in the Asia Pacific

2.2.2 Understanding Asia-Pacific Mountain Tourism Supply and Demand

2.2.2.1 Outdoor Adrenaline Sports

The Asia Pacific region is home to a diverse range of mountain landscapes, providing abundant resources for skiing and rock climbing. Countries such as Japan, South Korea, China, and New Zealand are particularly prominent for skiing, with well-developed resorts and infrastructure. Japan, for example, boasts world-renowned ski destinations like Niseko, known for its quality powder snow, while New Zealand offers extensive alpine terrain in the Southern Alps. Rock climbing opportunities are also abundant, with significant locations such as Thailand's Krabi province, offering world-class limestone cliffs, and China's Yangshuo region, known for its dramatic karst formations. These areas have increasingly attracted both domestic and international climbers, supported by growing infrastructure and climbing tourism services.

The supply side has been bolstered by increasing investments in tourism infrastructure, particularly in emerging markets like India and Southeast Asia. Governments and private operators are expanding facilities, improving access, and marketing their destinations globally. Demand for skiing and rock climbing in the Asia Pacific has grown significantly in recent decades, driven by rising middle-class incomes, urbanization, and a shift toward adventure



Fig. 28 – Skiing in Altai Prefecture, Xinjiang, China
(Source: douyin.com)



Fig. 29 – Rock Climbing (Source: pexels.com)

tourism. Skiing has seen increased popularity among domestic tourists in Japan and China, with significant numbers also arriving from neighboring countries like South Korea and Australia. The Winter Olympics held in Beijing in 2022 further boosted interest and investment in skiing. Rock climbing appeals to a niche yet growing market, attracting enthusiasts seeking adventure and unique landscapes. Destinations such as Thailand and Malaysia cater to both beginners and seasoned climbers, offering guided tours and climbing competitions. Additionally, the trend toward experiential travel and outdoor activities has supported this demand.

The main challenges for both activities include climate change, which affects snow reliability for skiing, and environmental degradation at climbing sites. Overcrowding and ecological impacts at popular locations are also concerns. Opportunities lie in diversifying offerings to include year-round tourism and sustainable practices. For instance, ski resorts are increasingly promoting off-season activities like mountain biking and hiking. Meanwhile, rock climbing destinations benefit from community-based tourism models that integrate conservation efforts and local economic benefits. Overall, the Asia Pacific region shows robust supply and growing demand for skiing and rock climbing, supported by unique landscapes and increasing interest in outdoor adventures. However, long-term sustainability will require addressing environmental challenges and ensuring equitable community involvement and benefit in tourism development.

2.2.2.2 Soft Adventure

The Asia Pacific region, with its vast and diverse mountain landscapes, has seen a steady rise in the popularity of walking, birdwatching, and cultural tourism. These activities align well with the increasing demand for nature-based and experiential tourism while also presenting challenges and opportunities for sustainable management. Walking tourism is a significant activity in mountain destinations across the Asia Pacific, appealing to a wide range of travelers. The demand is driven by a desire for physical activity, connection with nature, and opportunities to explore diverse landscapes. Iconic trekking destinations, such as Nepal's Annapurna Circuit and Japan's Kumano Kodo trails, attract international and domestic tourists alike.



Fig. 30 – Nepal Annapurna Peak Loop Hiking
(Source: NATTA)

Supply-side responses include the development of well-maintained trails, infrastructure for guided and self-guided tours, and accommodation catering to trekkers. However, the uneven distribution of these facilities often concentrates tourism in specific hotspots, leading to overcrowding and environmental degradation. Governments and local authorities are working on diversifying trekking routes and enhancing the visitor experience to address these challenges.

Birdwatching is increasingly popular among nature enthusiasts, particularly in biodiverse regions like Indonesia, Malaysia, and Papua New Guinea. The demand stems from the unique avian species found

in the region's mountains, including several endemic species. Birdwatchers, often characterized by their high willingness to spend, contribute significantly to local economies through specialized tours, equipment rentals, and related services. On the supply side, conservation organizations and tourism operators have developed birdwatching tours, integrating conservation education to protect fragile ecosystems. Key challenges include balancing visitor numbers with the conservation needs of sensitive habitats and ensuring the benefits reach local communities.

Cultural tourism in mountain areas is deeply intertwined with the rich traditions, customs, and spiritual heritage of local communities. In the Asia Pacific, destinations such as Bhutan, where cultural preservation is integrated with tourism, and the tribal regions of India and Vietnam, are prominent examples. Tourists are drawn to festivals, traditional crafts, and historical narratives, providing a unique cultural immersion. To meet demand, efforts have been made to develop authentic cultural experiences, such as homestays, local craft workshops, and guided tours focusing on indigenous knowledge. However, commercialization and cultural commodification remain concerns. Sustainable practices, like community-based tourism, are increasingly adopted to preserve cultural integrity while benefiting residents.



Fig. 31 – Mountain Bird Watching Activities (Source: pexels.com)

Post-pandemic trends favor outdoor and less crowded destinations, boosting the popularity of walking, birdwatching, and cultural tourism in the region's mountain areas. To meet the growing demand sustainably, stakeholders are focusing on year-round tourism, digital infrastructure, and community partnerships. Efforts to address over-tourism, environmental degradation, and cultural erosion include clear policies for visitor management, capacity building for local stakeholders, and innovative conservation funding mechanisms. These strategies aim to harmonize supply and demand, ensuring long-term benefits for both visitors and local communities.

2.2.2.3 Health, Wellness, Spirituality

Health, wellness, and spirituality-based tourism in the Asia Pacific region has grown significantly in recent decades, driven by global shifts in traveler preferences, advancements in tourism infrastructure, and the region's unique cultural and natural resources. The supply of wellness and spirituality-based tourism in the Asia Pacific region is heavily influenced by the diverse cultural and natural attributes of the area. Countries like India, Nepal, and Bhutan leverage their spiritual heritage, offering retreats centered on yoga, meditation, taichi, and holistic healing. These destinations attract tourists seeking spiritual renewal in sacred and tranquil mountain settings such as the

Himalayas. Hot springs, forest therapy, and wellness resorts are also increasingly common, especially in countries like Japan, China, and South Korea.

Mountainous areas are particularly well-suited for wellness tourism due to their clean air, natural beauty, and climate. For instance, mineral-rich hot springs in regions like Japan's onsen towns or Indonesia's volcanic springs provide both recreational and therapeutic benefits. The incorporation of traditional healing methods, such as Ayurveda in India or traditional Chinese medicine in China, adds cultural authenticity and appeal. The demand for health and wellness tourism is fueled by growing consumer awareness about health, the desire for stress relief, and the increasing appeal of natural, sustainable destinations. Post-COVID-19, there has been a marked rise in demand for open-air, less crowded destinations, further enhancing the appeal of mountain and wellness tourism. Tourists are seeking personalized and transformative experiences, such as mindfulness retreats or spa therapies rooted in local traditions.

Spiritual tourism also sees significant demand as travelers seek to connect with the rich religious and cultural traditions of the Asia Pacific. Destinations such as Mount Kailash, Bali's spiritual retreats, and Bhutan's monasteries attract both domestic

and international tourists. This is coupled with a global trend of travelers seeking meaning and self-discovery, aligning perfectly with the offerings of these destinations. While demand is strong, the development of health, wellness, and spirituality tourism in the Asia Pacific faces challenges. Ensuring sustainability, preserving the authenticity of cultural practices, and managing environmental impacts in fragile mountain ecosystems are critical issues. Governments and organizations are increasingly adopting sustainable tourism strategies, including community-based tourism models that involve local populations in decision-making and economic benefits.

2.2.2.4 Gastronomy and Community Based Tourism

The Asia Pacific region has seen a growing interest in food, cooking, and gastronomy-based tourism, driven by increasing consumer demand for authentic cultural experiences and the region's diverse culinary traditions. The intersection of food tourism and mountain destinations within this context provides unique opportunities and challenges for supply and demand. The supply of gastronomy-based tourism in the Asia Pacific is deeply rooted in the region's agricultural richness and culinary heritage. Mountainous regions offer unique opportunities to highlight indigenous food systems, traditional

farming practices, and locally sourced ingredients. Countries like Bhutan, Nepal, and the Philippines have capitalized on their traditional cuisines to create unique food tourism experiences. Mountain destinations provide opportunities for integrating agritourism and gastronomy tourism. For instance, visitors often participate in activities such as harvesting tea in high-altitude plantations in Sri Lanka, foraging in Himalayan forests, or learning to prepare regional dishes from local communities. These activities not only offer experiential value but also promote sustainability and support local economies.

Infrastructure development, including farm-to-table restaurants, cooking schools, and local food markets, plays a significant role in enhancing the supply chain. Countries like Japan and South Korea have developed mountain culinary trails and festivals to showcase regional flavors. Investments in digital technologies and marketing also enable local suppliers to reach broader audiences, bridging the gap between remote mountain areas and international demand. Demand for food tourism in the Asia Pacific is rising as travelers increasingly seek immersive and authentic experiences. The growing global interest in sustainable tourism has also contributed to this trend, with tourists drawn to locally produced, organic, and eco-friendly food products. The



Fig. 32 – Practicing Chen's Tai Chi in Mountainous Environments (Source: IMTA)



Fig. 33 – Mountain Yoga Meditation (Source: pexels.com)



Fig. 34 – Rural Cuisine (Source: PATA)



Fig. 35 – Mountain Agricultural Products (Source: PATA)

COVID-19 pandemic further amplified demand for less crowded, nature-based destinations, benefiting mountain gastronomy tourism. Cultural curiosity is a key driver of demand. Travelers are eager to explore regional cuisines as an entry point to understanding local heritage and traditions. For instance, Nepal's Himalayan cuisine, featuring dishes like momos and dal bhat, has become an integral part of trekking experiences. Similarly, traditional festivals in mountain regions often showcase local foods, attracting tourists during seasonal events.

Additionally, food and cooking tourism appeals

to a range of demographic groups, from young, adventure-seeking travelers to families and retirees. Social media and digital content also play a crucial role in driving demand, as visually appealing culinary experiences in scenic mountain settings attract global attention. While gastronomy-based tourism offers economic and cultural benefits, challenges remain. Fragile mountain ecosystems are vulnerable to over-tourism and waste management issues, requiring careful planning and regulation. There is also a need for capacity building among local communities to ensure they can meet tourist expectations while preserving their cultural integrity.

Case Study

Unlocking the Tourism Potential of Timor-Leste's Mount Ramelau

Mount Ramelau, the highest peak in Timor-Leste, is a destination of great cultural and religious significance, attracting an increasing number of visitors annually. While its pristine landscapes and symbolic value make it a prime candidate for mountain tourism development, there are significant challenges and opportunities to address.

Potential for Tourism Development

Mount Ramelau's appeal lies in its spiritual importance to the predominantly Catholic population and its breathtaking natural beauty. Current attractions include trekking to the summit, visits to the Virgin Mary statue, and the annual pilgrimage, which draws thousands of domestic visitors. In 2018, over 31,000 visitors climbed the mountain, highlighting its popularity despite limited international recognition. The nearby village of Hato Bulico, known for its cool climate, traditional thatched-roof houses, and stunning mountain landscapes, serves as a potential gateway for community-based tourism.

Key Challenges

Several constraints hinder the site's growth as a sustainable tourism destination. These include:

- **Infrastructure Deficiencies:** The poor condition of roads, limited waste management systems, inadequate signage, and insufficient visitor facilities (e.g., toilets, shelters).
- **Visitor Management:** Overcrowding during festivals leads to safety risks, environmental degradation, and

diminished visitor experiences.

- **Stakeholder Coordination:** Fragmented management between local communities, government entities, and religious organizations impedes cohesive planning and development.
- **Economic and Skill Gaps:** Local businesses lack access to training and resources to improve accommodations and services. Limited international marketing also restricts broader visitor appeal.

Strategic Opportunities

1. **Participatory Planning and Management:** Forming a stakeholder committee with representatives from local, governmental, and religious groups can ensure inclusive decision-making and align development goals.
2. **Diversifying Tourism Offerings:** Expanding activities to include cultural tours, mountain biking, and nature walks could attract diverse visitor segments. Promoting local crafts and agricultural products as souvenirs could enhance community benefits.
3. **Infrastructure Investment:** Upgrading roads, trails, and visitor facilities, and eventually developing visitor centers and campsites, could improve safety and enhance the overall experience.
4. **Sustainability Measures:** Introducing controlled access, educational campaigns, and waste management systems could mitigate environmental impacts and promote responsible tourism.
5. **Capacity Building:** Training programs for local guides, guesthouses, and restaurants could enhance service quality, improving visitor experiences and encouraging repeat visits.



Fig. 36 – Hikers Finishing the Climb of Timor-Leste's Highest Peak, Mt. Ramelau.
(Source: MRyan)

2.2.2.5 Safety and Security

The safety and security of tourists in the Asia Pacific region's mountain areas are critical considerations, reflecting the need for sustainable tourism practices and crisis management strategies. The region offers diverse and often remote mountain destinations, which present unique challenges and opportunities in ensuring the safety of travelers. Mountain environments are inherently fragile, with risks including avalanches, landslides, and extreme weather conditions. For example, the vulnerability of mountain ecosystems to climate change exacerbates these risks, affecting not only natural landscapes but also the infrastructure that supports tourism. High-altitude areas pose additional health risks, such as altitude sickness, which requires awareness and preventive measures for visitors. Infrastructure in remote mountain areas often lacks the robustness to handle large-scale tourism. Basic facilities like roads, healthcare, and emergency response services are limited in many regions, making it imperative to develop localized strategies to improve accessibility and safety. Governments and organizations have

increasingly focused on digitalizing tourism services and strengthening multi-level governance to enhance preparedness for emergencies.

Engaging local communities in tourism management has been identified as a key strategy to improve safety. Community-based tourism not only provides economic benefits but also ensures that local knowledge and practices contribute to managing risks and guiding tourists. Training local guides in safety protocols and first aid is another important aspect of fostering secure travel experiences. Adopting sustainable tourism practices helps mitigate some risks associated with over-tourism and environmental degradation. Managing the carrying capacity of mountain destinations and implementing waste management systems are examples of measures that contribute to safer and more secure tourism. The COVID-19 pandemic highlighted the need for robust health protocols in mountain tourism. Destinations have adapted by promoting open-air, less-crowded experiences, and ensuring hygiene and safety standards in accommodations and activities.

- The province of Guizhou boasts more than 30,000 bridges, including some of the world's highest, enhancing accessibility while reducing traffic congestion.
- The mountain's biodiversity includes rare species such as the Guizhou golden monkey, making it a crucial ecological conservation area.

Benefits of Visitor Limitations at Fanjing Mountain

- The daily visitor cap helps to preserve the natural environment, preventing excessive human impact and degradation of trails and habitats.
- Tourists experience a more peaceful and immersive journey, free from overcrowding, which enhances their connection with nature and the spiritual significance of the site.
- Local communities benefit from a well-regulated tourism model that ensures long-term employment and economic stability rather than short-term mass tourism booms that can strain resources.
- Infrastructure and facilities are maintained at high standards, preventing wear and tear that often accompanies high visitor traffic in other destinations.

Challenges of Implementing Visitor Limits

- Managing demand can be challenging, as high tourist interest sometimes leads to difficulties in securing visitation slots.
- Strict visitor limits, while necessary for sustainability, may constrain economic opportunities for businesses reliant on high tourism volume.
- Continuous monitoring and adaptation of visitor management strategies are needed to ensure long-term sustainability.

Sustainable Tourism Initiatives

- Local communities actively participate in tourism management, ensuring fair economic distribution while maintaining ecological balance.
- Educational programs and guided tours promote responsible tourism, encouraging visitors to respect the environment and cultural heritage.
- Regulations such as controlled access, eco-friendly transportation, and waste management initiatives help minimize environmental impact.
- Investments in sustainable accommodations and transportation ensure that tourism growth does not compromise ecological integrity.

Outcomes and Future Prospects

Tourism to Fanjing Mountain serves as a leading example of how strategic visitor limitations can prevent over-tourism while delivering benefits to both tourists and local communities. By capping visitor numbers, the mountain maintains its cultural and ecological integrity, ensuring a quality experience for visitors and

Case Study

Managing Tourism Carrying Capacity on Fanjing Mountain, China

Fanjing Mountain, located in Guizhou, China, is a UNESCO World Heritage Site renowned for its unique ecological and spiritual significance. Recognized as the 53rd UNESCO World Heritage Site in China, Fanjing Mountain has become a major destination for faith-based tourism while maintaining strict environmental protections through rigorous visitor management.

Key Features of Fanjing Mountain Tourism

- Fanjing Mountain is a sacred Buddhist site with temples dating back centuries, attracting both pilgrims and nature enthusiasts.
- A strict cap of 10,000 visitors per day is enforced to prevent over-tourism and protect the mountain's fragile ecosystem.

sustainable economic opportunities for locals. Moving forward, continued emphasis on sustainable tourism management will be vital to ensuring that Fanjing Mountain remains a premier, well-preserved destination for both faith-based and nature tourism.



Fig. 37 – Fanjing Mountain in Guizhou Province, China (Source: Provided by Li Guiyun)

2.2.3 Highlights of Mountain Tourism in the Asia-Pacific

The Asia-Pacific region is emerging as a prominent hub for mountain tourism, driven by its diverse landscapes, rich cultural heritage, and increasing infrastructure investments. Post-pandemic recovery has further fueled the region's appeal, with travelers prioritizing open spaces and nature-focused experiences. Several key trends are shaping the prospects for mountain tourism development in Asia and the Pacific.

2.2.3.1 Growing Adventure Tourism Potential

Mountain tourism in the Asia-Pacific region is undergoing a dynamic transformation, driven by shifting demographics, increasing demand for nature-based experiences, and expanding economic contributions. The sector, which encompasses trekking, mountaineering, and adventure tourism, continues to draw diverse visitor groups and

bolster local economies across the region. Nepal serves as a prominent example, having welcomed over 1.19 million foreign tourists in 2019, with a substantial proportion engaging in mountain-related activities such as trekking and mountaineering. The broader Asia-Pacific region similarly highlights the growth of mountain tourism, with international tourist arrivals increasing by 6% in 2017 to reach 323 million. Mountain destinations significantly contributed to this growth, aligning with the global trend where mountain tourism represents 9% to 16% of international tourist arrivals—equating to 195 to 375 million travelers in 2019.

The expansion of mountain tourism has been particularly pronounced in protected areas across Asia. Countries such as China, Japan, South Korea, Indonesia, and Vietnam have actively developed networks of protected mountainous regions to meet the rising demand for nature-based tourism. China's

protected areas now form a robust infrastructure supporting this growth, while Japan's national parks, many of which are mountainous, have seen increasing visitor interest driven by strategic park administration and promotion of nature tourism. Similarly, South Korea and Vietnam have aligned their governance and sustainable tourism initiatives to enhance the appeal of mountainous protected areas, facilitating a balance between visitor influx and environmental conservation. Economic contributions of mountain tourism in the region are substantial. The Asia-Pacific adventure tourism market, encompassing

mountain activities, generated revenue of USD 108.4 billion in 2023 and is projected to grow at a compound annual growth rate of 17.2% through 2030. Additionally, the wildlife tourism market, which includes mountainous regions, is forecast to grow from USD 84.4 billion in 2023 to USD 152.3 billion by 2030. Extreme tourism, a segment that includes mountain climbing and other high-adventure activities, is expected to grow at a remarkable compound annual growth rate of 17.9% from 2024 to 2031, reflecting heightened interest in mountain-based extreme sports.¹⁹

Case Study

Mountain Tourism in Pakistan – A Growing Adventure Tourism Hub

Pakistan's northern regions are home to some of the world's most iconic mountain ranges, including the Himalayas, Karakoram, and Hindu Kush. These landscapes feature five of the world's 14 peaks above 8,000 meters, including the formidable K2 (8,611 meters). In recent years, Pakistan has made significant progress in promoting mountain tourism by capitalizing on its stunning natural beauty, cultural heritage, and adventure opportunities.

Key Features of Mountain Tourism in Pakistan

- Pakistan's northern areas are a prime destination for trekkers, climbers, and adventure seekers, offering access to pristine valleys, vast glaciers like Baltoro and Biafo, and legendary peaks such as Nanga Parbat and K2.
- The Karakoram Highway, often called the "Eighth Wonder of the World," provides a breathtaking route through the mountains, attracting both local and international travelers.
- In 2023, foreign tourist arrivals surged by 115% compared to the previous year, reflecting a strong post-pandemic recovery.
- The Khyber Pakhtunkhwa province alone welcomed 8.8 million tourists in 2022, with destinations such as Naran, Kaghan, and Galiyat drawing millions of visitors.

Economic and Social Benefits

- The surge in tourism has significantly contributed to local economies by providing employment opportunities

¹⁹ Adventure Travel Trade Association (ATTA)

as guides, porters, and operators of guesthouses and homestays.

- Tourism revenue has supported infrastructure development, education, and healthcare in remote areas, improving the quality of life for local communities.
- At a national level, the tourism industry has bolstered foreign exchange earnings, encouraged infrastructure investment, and elevated Pakistan's global standing as a premier adventure and cultural tourism destination.

Challenges and Sustainable Tourism Initiatives

- The growing number of visitors raises concerns about environmental degradation, waste management, and the impact of human activity on fragile ecosystems.
- Sustainable tourism practices, including eco-friendly trekking policies, waste management initiatives, and responsible visitor guidelines, are being integrated to preserve the region's natural beauty.
- Government and private-sector collaborations aim to balance economic benefits with environmental conservation, ensuring long-term sustainability in mountain tourism.

Prospects

Pakistan's mountain tourism sector continues to thrive, offering unparalleled experiences for adventure travelers while fostering economic growth in remote regions. By implementing sustainable tourism practices, the country is ensuring that its stunning landscapes and cultural heritage remain protected for future generations. With ongoing investment in infrastructure and responsible tourism policies, Pakistan's northern areas are poised to become a global hub for mountain tourism.



Fig. 38 – Pakistan's Baltogo Glacier (Source: pexels.com)

2.2.3.2 Sustainable tourism

The Asia-Pacific region is embracing three interconnected forms of sustainable tourism – ecotourism, regenerative tourism, and voluntourism – as part of a broader global movement toward responsible travel. It is important to understand the distinct yet overlapping meanings of these terms and how they enrich both travelers and the destinations they visit.

- Ecotourism is centered on responsible travel to natural areas, emphasizing conservation, education, and benefiting local communities.
- Regenerative tourism goes beyond sustainability by not only maintaining natural and cultural environments but actively restoring and improving them for future generations.
- Voluntourism blends travel with service, where visitors contribute their time and skills to community or environmental projects, creating meaningful connections while making a positive impact.

Countries like Bhutan, which measures tourism success by "Gross National Happiness," and New Zealand, renowned for its conservation-focused tourism model, are leading the way. Travelers in the region seek experiences that not only minimize their environmental footprint but actively contribute to ecosystem restoration and community well-being. Programs promoting renewable energy, waste management, and community-led conservation efforts are becoming integral to mountain tourism in the region.



Fig. 39 – One of the spectacular Amman resorts in Bhutan (Source: PATA)

Voluntourism, which combines travel with meaningful volunteer work, plays a vital role in fostering sustainable development and conservation in mountain tourism. In the Asia-Pacific region, one notable example is the Great Himalayan Trail conservation program in Nepal. This initiative allows travelers to actively participate in reforestation efforts, waste management projects, and community development programs (e.g., school and electricity) while trekking through the region's breathtaking landscapes. By engaging directly with local communities and environmental conservation efforts, voluntourists contribute to protecting fragile ecosystems, preserving cultural heritage, and supporting sustainable livelihoods. Such programs exemplify how voluntourism can transform travel into a purpose-driven experience, fostering deeper connections between visitors and the destinations they explore.



Fig. 40 – Nepal's Dusit Thani Himalaya Resort (Source: PATA)

2.2.3.3 Experiential Leisure Tourism

Luxury mountain tourism is gaining momentum in the Asia-Pacific, with destinations blending natural beauty and high-end amenities. Eco-conscious resorts in locations such as Japan's Hakone region and Indonesia's mountainous retreats cater to affluent travelers seeking sustainable yet luxurious experiences. These establishments offer wellness-focused packages and immersive activities, allowing guests to engage with nature responsibly while enjoying premium accommodation. Notable

examples include the Aman properties in Bhutan and the Dusit Thani Himalayan Resort in Nepal.

Asia-Pacific's rich cultural tapestry provides unique opportunities for cultural immersion in mountain regions. Tourists are increasingly drawn to experiences that allow them to engage with indigenous communities, participate in local festivals, and learn traditional crafts. For example, Bhutan's Tsechu festivals and Nepal's vibrant mountain villages provide authentic cultural exchanges. Community-based tourism initiatives in countries like Vietnam and Indonesia promote sustainable practices while empowering local populations to benefit directly from tourism. The serene mountain environments of Asia-Pacific are ideal for wellness tourism, a trend that has grown significantly in recent years. Destinations such as India's Himalayan retreats and Bali's mountain sanctuaries are popular for yoga, meditation, and holistic therapies. Wellness packages that combine natural beauty with traditional healing practices, such as Ayurveda and spa treatments, are in high demand. The post-pandemic focus on mental and physical well-being has further accelerated the popularity of these offerings.

Asia Pacific mountain tourism is leveraging technology to enhance the visitor experience. Mobile apps, e-commerce platforms, and data-driven solutions enable travelers to plan their trips seamlessly, access real-time updates, and book accommodations efficiently. Virtual reality tools are



Fig 41- Laos' Rosewood Hilltop Tents (Source: PATA)



Fig 42 - Mountain Skiing (Source: pexels.com)



Fig 43 - Mountain Camping (Source: pexels.com)

also being used to showcase destinations such as Mount Fuji and the Himalayas, offering previews to potential visitors. Additionally, advancements in safety technology, such as wearable devices and GPS trackers, ensure a secure exploration of challenging terrains.

Winter sports such as skiing and snowboarding are gaining traction in the Asia-Pacific, particularly in destinations like Japan's Hokkaido region, South Korea's Pyeongchang, and India's Gulmarg. While climate change poses challenges, resorts are adopting eco-friendly practices such as renewable energy use and sustainable snowmaking to combat inconsistent snow conditions. These innovations ensure the longevity of winter tourism while maintaining environmental responsibility.

Camping and outdoor recreation are thriving in Asia-Pacific, with countries like Australia and New

Zealand leading the segment. The region's diverse mountain landscapes offer ideal settings for activities such as glamping, hiking, and nature exploration. Flexible and affordable camping options attract both domestic and international travelers, driving growth in this segment. Prominent examples in the region include the Rosewood's Hilltop Tents in Luang Prabang in Laos and the Cardamon Tented Camp in Cambodia's Cardamon mountains.

The rich biodiversity of Asia-Pacific mountain regions has spurred interest in wildlife tourism. Destinations like Nepal's Annapurna Conservation Area and India's Himalayan sanctuaries offer



Fig. 44 - Cambodia's Cardamon Tented Camp (Source: PATA)

opportunities to observe rare species such as snow leopards, red pandas, and Himalayan tahr in their natural habitats. Responsible wildlife tourism programs emphasize conservation while providing unique, educational experiences for visitors.

Mountain tourism in the Asia-Pacific region reflects a dynamic blend of sustainability, cultural engagement, and adventure. As travelers increasingly seek meaningful and responsible experiences, Asia-Pacific mountain destinations are well-positioned to leverage these trends, ensuring growth while preserving the natural and cultural assets that make the region unique.

Digitalization offers innovative solutions to address over tourism in Asia-Pacific mountain regions, a pressing concern exacerbated by the COVID-19 pandemic. Smart tourism systems use data analytics to manage visitor distribution, reducing overcrowding at popular sites while promoting lesser-known destinations. For example, geofencing technology can monitor and limit the number of visitors in specific areas, preventing environmental degradation. Mobile apps with waste tracking and recycling features encourage responsible tourism behaviors, tackling pollution and waste issues in ecologically sensitive mountain regions. These solutions align with post-pandemic sustainability goals by promoting balanced tourism growth and protecting natural resources.

2.3 Characteristics of Sustainable Asia Pacific Mountain Tourism

2.3.1 Economic Sustainability

2.3.1.1 Invisible Burdens

Sustainable tourism in mountain regions of the Asia Pacific is crucial for preserving fragile ecosystems, supporting local communities, and maintaining cultural heritage. However, achieving sustainability imposes significant economic burdens on stakeholders, including governments, businesses, and local communities. Mountain tourism requires substantial investment in infrastructure such as roads, clean water systems, and energy supply. In remote areas, these costs are amplified due to challenging terrain and limited accessibility. Additionally, ensuring sustainability entails using eco-friendly materials and designs, further increasing construction costs. For instance, building accommodations with minimal ecological impact often involves higher initial investments compared to conventional construction methods. Proper waste management in mountain tourism destinations is critical but expensive. High-altitude regions face logistical difficulties in transporting waste, requiring specialized equipment and labor. Moreover, initiatives to combat pollution, such

as installing advanced sewage treatment plants or managing plastic waste, impose ongoing costs on local governments and private operators. Implementing and monitoring sustainable practices involve administrative expenses. Authorities need to conduct environmental impact assessments, enforce regulations, and train personnel to manage sustainable tourism activities effectively. Regular monitoring of the carrying capacity of tourist sites, along with education campaigns for visitors, adds to the financial burden.

Mountain tourism is particularly vulnerable to climate change, which necessitates adaptive measures. Ski resorts, for example, require artificial snowmaking as natural snow becomes less reliable, significantly increasing operational costs. Other measures, such as flood defences and climate-resilient infrastructure, further stretch budgets. Promoting community-based tourism is a pillar of sustainable tourism, but it requires investments in training, capacity building, and marketing. Additionally, ensuring fair economic returns for local communities may conflict with maximizing profits, requiring subsidies or tax incentives from governments. Digitalization, a key enabler of sustainable tourism, involves costs for developing and maintaining online platforms, digital guides, and virtual interpretation tools. Smaller operators, particularly in developing regions, face challenges in accessing and adopting these technologies.²⁰

2.3.1.2 Seasonality

Tourism seasonality in the Asia Pacific region significantly impacts the economic stability of mountain destinations, affecting stakeholders from local communities to governments. The peaks and troughs in tourist arrivals create a range of economic challenges and opportunities.

Seasonal tourism leads to fluctuating revenue streams

for businesses. During peak seasons, the influx of tourists boosts local economies through increased spending on accommodations, food, transport, and recreational activities. However, the off-season often sees sharp declines in visitor numbers, leaving businesses with limited income to cover fixed operational costs such as rent, maintenance, and wages. Seasonal demand creates employment opportunities during busy periods but often results in layoffs or reduced working hours in the off-season. Workers in mountain tourism hubs, such as ski resorts and trekking destinations, face financial insecurity due to these employment patterns. The lack of consistent income makes it difficult for households to achieve financial stability and for communities to retain skilled labor. The infrastructure developed for peak tourist seasons, including hotels, transport networks, and recreational facilities, often remains underutilized during the off-season. This underuse not only represents a lost opportunity for revenue but also leads to higher maintenance costs relative to income, creating inefficiencies in resource allocation. During peak seasons, the high concentration of visitors strains natural resources and increases environmental degradation in mountain destinations. This seasonal pressure necessitates additional investments in conservation and restoration efforts, further impacting local and regional budgets.

2.3.1.3 Smart Technology Tourism Applications

The integration of technology in tourism has significantly enhanced the economic sustainability of mountain destinations across the Asia-Pacific region. By improving operational efficiency, reducing costs, creating new employment opportunities, and diversifying revenue streams, smart technologies are reshaping the industry in a financially viable manner. These technologies not only enhance visitor experiences but also generate cost savings and long-term financial benefits for tourism service providers by reducing waste, optimizing resource use, and

increasing revenue potential. However, realizing these benefits requires strategic investments and careful management.

Virtual Reality (VR) and Augmented Reality (AR) technologies (discussed in more detail in Section 2.3.4.1) are transforming visitor engagement while driving economic growth and reducing costs for tourism operators. VR enables potential tourists to explore trails, participate in simulated mountain sports, and experience destinations remotely, lowering marketing expenses and increasing conversion rates for bookings. AR enhances in-destination experiences by overlaying interactive digital content on real-world landscapes, providing historical, cultural, and environmental insights that elevate guided tours. This interactivity increases visitor satisfaction and fosters longer stays, which leads to higher visitor spending at local businesses. In Japan's Nagano Prefecture, AR-guided heritage trails have led to a reported 20% increase in tourist engagement, generating additional income for local guides and businesses while reducing the need for printed materials and signage.

Smart trails equipped with QR codes, digital road signs, and AR markers not only enrich visitor experiences but also contribute to economic efficiency by reducing the need for printed materials and human tour guides. These technologies lower

operational costs while providing self-guided options that encourage independent travel. In Taiwan's Alishan National Scenic Area, digital interpretation trails have increased visitation by 30% while decreasing operational expenditures associated with traditional guided tours. This shift allows service providers to allocate resources more efficiently, reducing labor costs while maintaining high levels of visitor engagement.

Big data and machine learning play a pivotal role in economic sustainability by enabling demand forecasting, optimizing resource allocation, and reducing operational waste. AI-driven analytics help businesses adjust pricing models dynamically, ensuring maximum revenue during peak seasons while maintaining affordability in off-peak periods. By analyzing traveler behavior, tourism operators can optimize staffing levels, manage inventory more effectively, and reduce unnecessary expenditures. In South Korea's Jeju Island, AI-driven tourism demand forecasting has helped hotels and transportation providers reduce excess inventory and energy consumption by 15%, cutting costs while maximizing revenue efficiency. This level of optimization leads to improved financial stability and resilience against market fluctuations.

Drones contribute to economic resilience in mountain tourism by significantly reducing costs associated with both marketing and safety operations. High-quality aerial photography and videography enhance destination marketing at a fraction of the cost of traditional promotional campaigns, helping attract new visitors with minimal expenditure. Additionally, drones play a crucial role in safety management by monitoring weather conditions, detecting hazards, and assisting in search and rescue operations—lowering emergency response expenses for tourism operators. The Nepalese Himalayas have successfully integrated drones for route safety and search operations, cutting rescue costs by an estimated 40% while improving response efficiency and ensuring visitor safety.



Fig.45 – Experience Mountain Tourism with VR Technology (Source: ibaotu.com)

²⁰ The Travel Foundation (2019). *Destinations at Risk: The Invisible Burden of Tourism*.



Fig. 46 – Drones Assist in the Development of Mountain Agriculture (Source: Guizhou Daily)

Wearable devices embedded with biometric sensors not only enhance visitor safety but also create new revenue streams through premium adventure tourism services. Tour operators in New Zealand's Southern Alps have introduced smart wearables that monitor climbers' health, offering tiered safety packages that generate additional revenue while ensuring visitor well-being. These innovations also reduce liability risks for operators, lowering insurance costs and improving profitability. By integrating these technologies, tourism service providers can enhance their offerings while achieving long-term cost savings.

Mobile applications streamline travel planning, reducing administrative overhead while boosting visitor spending. Real-time updates on weather, traffic, and ticket availability improve logistical efficiency, while integrated booking systems encourage higher engagement with local businesses. In Australia's Blue Mountains, a mobile app integrating local businesses with navigation tools has led to a 25% increase in small business transactions, demonstrating how digital platforms drive local economic activity. By automating booking processes and customer interactions, service providers save on

labor costs while increasing customer retention and satisfaction.

Despite these advantages, implementing smart technologies comes with initial capital costs and ongoing maintenance requirements. Establishing digital infrastructure in remote areas remains a challenge, often requiring public-private partnerships or targeted subsidies to ensure equitable access. However, these investments yield long-term economic benefits by reducing operational inefficiencies and enhancing service quality. Moreover, smaller tourism enterprises may struggle to compete with well-funded operators, necessitating policy interventions that facilitate digital upskilling and financial support mechanisms to ensure inclusive growth and fair competition in the sector.

While smart technologies offer economic efficiencies and competitive advantages, destinations should also recognize the value of digital detox tourism. Some visitors seek to disconnect from technology and immerse themselves in nature, presenting a niche market opportunity. Eco-luxury retreats such as Eremito in Italy and Bhutan's off-grid lodges provide high-value, low-impact tourism experiences that generate revenue while maintaining environmental and cultural integrity. By balancing technological innovation with mindful travel options, destinations can cater to diverse market segments, ensuring long-term economic sustainability.

The Asian Development Bank (ADB) provides a useful framework of how much smart technologies can be applied across various tourism domains. This framework has been modified below to include examples of good practice from across the Asia Pacific in selected tourism domains.²¹

Domain	Example technology	Good practice example(s)
Destination Management	Early warning detection systems - systems of meteorological and geological sensors to detect adverse weather conditions, tsunamis, and other disasters, providing critical lead time for emergency response.	The Indian Ocean Tsunami Warning System (IOTWS) plays a crucial role in protecting coastal tourism areas from tsunamis. Similar early warning systems can be put in place in mountain areas as the risks of natural disasters increases due to climate change. 
Infrastructure and sustainability	Energy-efficient tourism buildings - smart heating, ventilation, and air conditioning systems reduce energy consumption.	Solar panel bench phone charger from Henan Province, China 
Marketing	Big Data analytics to gather and analyze visitor demographics, travel choices, and spending patterns to inform tourism marketing strategies.	The Singapore Tourism Analytics Network (Stan), developed by the Singapore Tourism Board (STB), collects and analyzes large datasets from various sources. 

21 Asian Development Bank (2024). Smart Tourism Ecosystem Development Readiness in Southeast Asia.

Travel experience	E-visas - Convenient and transparent electronic visa application and issuance improves destination competitiveness.	Currently available for travel to Vietnam, Thailand, India, Cambodia and Japan. 
Smart businesses	Smart hospitality management - integrated smart solutions such as automated check-in systems, personalized experiences, and preventive maintenance.	QR Code food delivery system at the Great Wall of China. 

2.3.2 Socio-cultural Sustainability

2.3.2.1 Communities

Tourism in the Asia Pacific region has significant socio-cultural impacts on mountain communities, both positive and negative. The region's rich cultural heritage, traditions, and unique ecosystems make it a prime destination, but the increasing influx of tourists brings profound changes to local ways of life. Tourism fosters cultural exchange, enabling communities to share their traditions, crafts, and lifestyles with visitors. This exchange promotes cross-cultural understanding and appreciation, strengthening global awareness of local heritage. Community-based tourism initiatives often empower local populations by providing opportunities to showcase traditional skills, from handicrafts to performing arts, which can lead to cultural preservation and revitalization.

Economic benefits from tourism can also support the maintenance of cultural heritage. Revenue

generated from tourist activities is often reinvested in preserving historical sites, funding local festivals, and safeguarding indigenous practices. Additionally, interactions with visitors encourage younger generations to value their heritage and remain connected to their roots.

Tourism can, however, contribute to the erosion of cultural identity. The commodification of traditions, where cultural elements are modified to appeal to tourists, risks diluting their authenticity. Over time, this process can weaken the cultural fabric of communities and undermine the value of their heritage. The influx of tourists may also create social tensions, as disparities between locals and visitors become more pronounced. Rising costs of living, property price inflation, and an over-reliance on tourism revenue can strain local resources and alter community dynamics. Cultural clashes and overcrowding during peak tourist seasons further disrupt traditional ways of life.

Case Study

Community Cultural Sustainability in Sapa, Vietnam

Sapa, located in Vietnam's Lào Cai Province, is a hub of cultural and natural richness. Nestled amidst towering peaks and verdant rice terraces, Sapa's ethnic minority villages are the heart of its tourism appeal. The region is home to diverse communities, including the Hmong, Dao, and Tay, whose vibrant traditions and lifestyles offer an authentic experience for visitors. Over the past two decades, Sapa has transitioned from an agriculture-based economy to a tourism-driven one, bringing both opportunities and challenges.

Key Attractions

- Sapa's most unique offering lies in its villages, such as Lao Chai, Ta Van, and Cat Cat. These communities allow visitors to experience traditional customs, from intricate weaving and indigo dyeing to local music and cuisine. Homestays in these villages offer immersive experiences, fostering deeper cultural exchange while providing income for local families.
- Ethnic groups produce distinctive textiles, silver jewellery, and handmade goods that are sold in bustling markets like Sapa Market. These crafts not only sustain cultural traditions but also generate revenue for artisans, many of whom are women.
- While Sapa is famed for its natural beauty, including its terraced rice fields and the imposing Fansipan Mountain, these attractions are often tied to the ethnic communities that cultivate the land and guide trekking tours.

Economic Transformation

Historically, agriculture dominated Sapa's economy, with rice cultivation and livestock farming as primary sources of livelihood. However, the rise of tourism has shifted the economic landscape dramatically. Today, tourism generates significant income for the region, outpacing traditional agriculture. Ethnic minority families have embraced this change by offering homestays, guided tours, and craft sales. Women have gained economic independence through selling handmade textiles and souvenirs to visitors.

This shift has also led to increased access to education and healthcare for local communities, funded in part by tourism revenue. However, the dependency on tourism leaves Sapa vulnerable to fluctuations in visitor numbers, especially during global disruptions like the COVID-19 pandemic.

Challenges

- The surge in tourism has sometimes led to the commodification of ethnic traditions, with cultural performances and artifacts being tailored to meet tourist expectations rather than preserving their authenticity.
- Over-tourism in popular villages and natural sites has resulted in waste management issues and environmental degradation.
- While some families have prospered through tourism, others, particularly those in more remote areas, remain reliant on subsistence farming and have yet to benefit significantly.

Sustainable Tourism and Future Prospects

Efforts are underway to balance economic growth with cultural and environmental preservation. Community-based tourism initiatives, supported by NGOs and local authorities, aim to empower ethnic groups by providing them with tools to manage tourism sustainably. Programs promoting eco-tourism and low-impact activities, such as trekking and cultural workshops, are being expanded. By prioritizing inclusive development and respecting the integrity of its ethnic communities, Sapa can maintain its unique identity while leveraging tourism to uplift its people.



Fig. 47 – Vietnam's Sapa Cultural and Mountain Tourism Experience (Source: PATA)

2.3.2.2 Culture

Culture plays a central role in tourism in the Asia Pacific region, where the diversity of traditions, heritage, and customs is a primary attraction for domestic and international travelers. This cultural wealth not only enhances the visitor experience but also fosters socio-economic growth and preservation of local identities. The Asia Pacific region's cultural diversity is deeply intertwined with its tourism appeal. Historic landmarks, traditional festivals, and indigenous crafts draw millions of visitors annually. Destinations such as Japan's Kyoto, with its temples and tea ceremonies, and the tribal villages of Southeast Asia exemplify how cultural heritage attracts tourists seeking unique experiences.

Tourists are increasingly drawn to community-based and immersive experiences that offer a deeper connection to local traditions. Activities such as participating in cultural festivals, learning traditional crafts, or exploring historic sites provide a rich, authentic experience while supporting local economies. Tourism contributes to the preservation of cultural practices by generating revenue that can be reinvested in heritage conservation. For example, income from entrance fees to cultural sites often funds maintenance and restoration efforts. Additionally, cultural tourism revitalizes traditional crafts and performing arts by creating markets for these skills, ensuring

their continuation. While tourism supports cultural preservation, it can also lead to commodification and the loss of authenticity. Modifying traditions to cater to tourist preferences risks diluting their original meaning and value. Overcrowding at cultural sites and cultural clashes between tourists and locals may strain relationships and threaten the sustainability of tourism. To achieve harmony between culture and tourism, sustainable practices must prioritize authenticity, local involvement, and equitable benefits. This approach ensures that cultural heritage continues to thrive as an integral part of the Asia Pacific tourism landscape.

2.3.3 Environmental Sustainability

2.3.3.1 Water and Solid Waste Management

Water and solid waste management are critical concerns for sustainable mountain tourism in the Asia-Pacific region. High visitor concentrations during peak seasons strain local water treatment and waste management systems, often exceeding their capacity to handle the surge. Plastic waste is a particularly pressing issue. The phenomenon of "plastic rain," where microplastics are found even in remote mountain areas, has been documented in regions such as the Himalayas and the Southern Alps of New Zealand, underscoring the severity of the problem. In the Asia-Pacific, improperly managed waste from tourism activities contributes to soil and water contamination, impacting both ecosystems and local communities.

Water usage in mountain tourism, particularly in ski resorts and luxury accommodations, often leads to over-extraction of local water resources. This overuse not only depletes freshwater supplies but also disrupts the ecological balance of sensitive mountain habitats. Additionally, wastewater from tourism operations, if inadequately treated, pollutes streams and lakes, threatening aquatic biodiversity.

Mitigation strategies in the Asia-Pacific include banning single-use plastics, promoting recycling

initiatives, and educating visitors on responsible waste disposal. Advanced waste management technologies, such as anaerobic digestion and composting systems, are being integrated into tourism operations to reduce environmental impact. In water management, greywater recycling systems and efficient irrigation techniques are helping to balance the needs of tourism with local resource availability. Mountain destinations across the region are increasingly adopting these sustainable practices to protect their fragile ecosystems while ensuring long-term viability for tourism-dependent communities.

2.3.3.2 Greenhouse Gas Emissions

Tourism in mountainous regions is a significant contributor to greenhouse gas emissions (GHG). Key sources include transportation, energy-intensive accommodations, and the maintenance of recreational facilities like ski slopes. Transportation alone accounts for a substantial share of tourism emissions, with air travel and private vehicles increasing the carbon footprint of remote destinations. The impacts of GHG emissions are particularly severe in mountain ecosystems, which are highly sensitive to climate change. Rising global temperatures, driven by record-high GHG levels, exacerbate extreme weather events such as floods, droughts, and heatwaves, disproportionately affecting these fragile regions. For instance, ski resorts are increasingly reliant on artificial snowmaking to mitigate reduced snowfall, a process that consumes significant energy and water.

There is increased adoption of electric vehicles and other lower carbon fuels across much of Asia and the Pacific. Policy initiatives in the region are targeting emission reductions through the adoption of renewable energy sources and improved energy efficiency in tourism infrastructure. However, challenges remain, including the high costs of renewable technologies and the lack of comprehensive data on tourism-related emissions to guide policy making.

Addressing GHG emissions in Asia-Pacific mountain destinations requires a multi-pronged approach: enhancing public transportation options to reduce reliance on private vehicles, incentivizing low-emission technologies in accommodations, and investing in sustainable construction practices. These efforts, combined with stricter regulations and community engagement, can help mitigate the carbon footprint of mountain tourism.

2.3.3.3 Renewable Energy

Renewable energy adoption is emerging as a cornerstone of sustainable mountain tourism in the Asia Pacific region. Many mountain destinations are increasingly integrating renewable energy sources, such as solar and wind power, to reduce their environmental footprint and enhance long-term sustainability. Resorts and eco-lodges across the region are implementing energy-efficient infrastructure, including high-efficiency insulation, heat reuse technologies, and sensor-based lighting to optimize energy consumption.

Some accommodations in the Asia Pacific have achieved "zero water, zero electricity, and zero emissions" through innovative green building technologies. For example, eco-resorts in the Himalayas and Japan's mountainous regions are harnessing solar power and incorporating intelligent climate control systems to minimize energy waste while maintaining guest comfort. In Bhutan, hydropower plays a critical role in sustaining tourism operations while maintaining the country's carbon-negative status.



Fig. 48 – Mountain Wind Power Station
(Source: qxkp.net)

Despite these advancements, renewable energy adoption in mountain tourism faces challenges, including high initial investment costs and logistical difficulties in remote areas. To overcome these barriers, governments and stakeholders are providing financial incentives, fostering public-private partnerships, and investing in energy storage solutions to ensure a stable and reliable power supply.

2.3.4 Emerging Technologies and Applications for Sustainability

2.3.4.1 Artificial Intelligence and Virtual Reality

The Asia Pacific region, home to some of the world's most iconic mountain destinations, faces significant challenges in balancing tourism growth with environmental sustainability. Emerging technologies, particularly artificial intelligence (AI) and virtual reality (VR), touched upon in Section 2.3.1.3, offer transformative solutions to address these challenges. These tools are increasingly integrated into smart tourism ecosystems, in China (see the case study below), which aim to enhance destination competitiveness, improve visitor experiences, and support sustainability initiatives.

Artificial Intelligence (AI)

AI is a cornerstone of smart tourism ecosystems, defined as systems that integrate advanced digital technologies to enhance the efficiency, sustainability, and appeal of destinations. AI-driven platforms enable the analysis of vast amounts of data in real time, providing actionable insights for tourism operators. By monitoring visitor behavior, predicting demand, and optimizing resource use, AI supports evidence-based decision-making in destination management. For example, AI applications in smart tourism ecosystems help policymakers in mountain regions optimize infrastructure development, such as planning energy-efficient accommodations or waste management systems. AI-powered platforms can analyze seasonal demand trends, guiding investments to minimize overbuilding while ensuring sufficient capacity during peak periods. AI enhances the

visitor experience by providing real-time insights into conditions at tourism hotspots. Applications like Singapore's "MySentosa" collect data on crowd levels and waiting times, allowing tourists to adjust their itineraries and avoid congested areas. In mountain tourism, such tools can prevent overcrowding on popular trails or at heritage sites, reducing ecological strain while improving visitor satisfaction. AI contributes significantly to sustainability by optimizing the use of resources such as energy and water. For instance, AI-driven systems can regulate heating, cooling, and lighting in accommodations, ensuring energy is used efficiently without compromising comfort. Similarly, AI-powered waste management systems monitor disposal patterns and adjust collection schedules to prevent environmental contamination. AI also helps manage environmental risks in fragile mountain ecosystems. For example, predictive analytics powered by AI can monitor weather conditions, detect potential landslides, and issue warnings to tourists and local authorities. This proactive approach enhances safety and minimizes the ecological impact of tourism activities.

Virtual Reality (VR)

Virtual reality (VR) enables tourists to experience mountain destinations virtually before traveling. This serves multiple purposes: it allows potential visitors to

make informed decisions, reduces unnecessary trips, and promotes awareness of sustainable practices at the destination. VR showcases hiking trails, cultural landmarks, and environmental conservation efforts, inspiring tourists to support eco-friendly initiatives. VR enriches the on-site experience by offering interactive, educational content about the natural and cultural heritage of mountain regions. For example, visitors can use VR headsets to explore areas restricted for conservation purposes or learn about the history of local communities without disrupting their daily lives. Such innovations reduce the physical footprint of tourism while deepening engagement.

Synergistic Effect

The integration of AI and VR amplifies their potential for sustainability. Smart tourism ecosystems combining AI and VR enable seamless visitor management and resource optimization. For instance, AI can identify overcrowded areas, while VR offers alternative attractions to disperse visitors, easing pressure on sensitive sites. Moreover, these technologies support long-term planning. AI-driven analytics inform policy decisions, while VR simulations model the environmental impact of proposed developments, allowing stakeholders to assess risks and benefits before implementation.

Case Study

China's Digital Solutions for Mountain Tourism

China has embraced smart tourism to revolutionize the travel experience, particularly in its mountain regions. By integrating advanced digital technologies and sustainable practices, the country has made travel more convenient, personalized, and eco-friendly. Smart tourism incorporates tools such as mobile applications, artificial intelligence (AI), the Internet of Things (IoT), and augmented and virtual reality (AR/VR) to enhance visitor engagement and destination management.

Components of Smart Tourism

Smart tourism in China is built on:

- Mobile Applications: Streamlining travel planning, navigation, and bookings.
- IoT: Connecting devices for seamless communication and real-time updates.
- AI and Big Data: Personalizing travel recommendations and optimizing resource management.
- AR/VR: Providing immersive and educational experiences.
- Sustainability Tools: Integrating eco-friendly technologies like solar-powered facilities.

Examples of Smart Tourism in China's Mountain Regions:

- QR Code Delivery System at the Great Wall Tourists visiting mountainous sections of the Great Wall can enjoy a unique and efficient service enabled by QR codes. Visitors scan QR codes located at rest areas to order snacks, water, or souvenirs, which are delivered directly to their location. This reduces the need for visitors to carry supplies on steep terrain while enhancing convenience. It also minimizes littering by encouraging controlled packaging and waste management.
- Virtual and Augmented Reality for Ancient Mountain Rock Art In mountain museums across China, AR and VR technologies bring ancient rock art to life. Visitors can use VR headsets to virtually explore cave paintings and cultural relics, gaining insights into the lives of early settlers in these regions. Interactive AR features allow tourists to superimpose digital reconstructions onto real landscapes, creating an engaging and educational experience.
- Solar Panel Bench Phone Chargers To address sustainability and convenience, many mountain trails and rest areas are equipped with solar panel benches that double as phone charging stations. These benches ensure that tourists can stay connected while promoting renewable energy use. They also reduce the dependency on traditional charging infrastructure in remote areas.
- Real-Time Travel Updates and Eco-Friendly Transport Smart travel apps in China provide real-time updates on trail conditions, weather, and visitor congestion in popular mountain destinations. This allows tourists to plan their trips efficiently and reduce environmental impact by avoiding overcrowded routes. Additionally, eco-friendly shuttle buses powered by renewable energy are deployed in some areas, minimizing pollution while ensuring accessibility.

- In Guizhou's Xijiang Qianhu Miao Village, AI-powered robot dogs are being deployed to assist with crowd monitoring, safety patrols, and environmental surveillance. These four-legged machines provide real-time data on visitor flow, helping manage peak periods and reduce congestion. Equipped with cameras and sensors, they enhance site security and deliver announcements to tourists. Their use reflects China's growing integration of robotics in scenic management. By



Fig. 49 – AI Robot Dogs Assist Tourists in China's Guizhou Province (Source: PATA)

supporting intelligent oversight, these AI dogs contribute to safer, more efficient, and tech-enabled tourism experiences.²²

Impact

China's smart tourism initiatives in mountain regions demonstrate how technology can enhance the travel experience while promoting sustainability and cultural preservation. By integrating digital solutions, these programs offer greater convenience to tourists, support local economies, and ensure environmental stewardship. The success of these efforts highlights the potential of smart tourism to shape the future of mountain tourism worldwide.

2.3.4.2 Promotion of Sustainable Practices and International Standards

Increasingly, destinations across the Pacific Asia region are adopting measures such as renewable energy usage, waste reduction initiatives, sustainable transportation systems, and responsible water and energy management. Notably, these efforts align closely with SDG 12 (Responsible Consumption and Production) and SDG 13 (Climate Action). Leading the international effort for improved sustainability across the tourism value chain, the Global Sustainable Tourism Council (GSTC) is an international organization dedicated to establishing and managing global standards for sustainable travel and tourism. It sets the GSTC Criteria, which serve as a framework for businesses, destinations, and organizations to develop responsible tourism practices. These criteria are divided into four key areas: sustainable management, socioeconomic impacts, cultural sustainability, and environmental conservation. The GSTC Industry Criteria apply to hotels and tour operators, while the GSTC Destination Criteria guide sustainable tourism development at a regional level. By providing certification programs, training, and accreditation, the GSTC helps stakeholders align with global good practices, ensuring tourism

contributes positively to local communities, cultural heritage, and environmental protection.²³ Japan, for example, has implemented zero-waste policies in several mountainous regions, encouraging tourists to minimize their ecological footprint. Additionally, New Zealand's focus on renewable energy in mountain resorts exemplifies how sustainable practices can be seamlessly integrated into tourism infrastructure. These initiatives not only reduce environmental impact but also attract eco-conscious travelers, contributing to the long-term resilience of mountain tourism.

2.3.4.3 International Indices to Measure Performance

In addition to GSTC criteria, there are other important international indices used by public and private sector stakeholders to measure performance of their tourism economies vis-à-vis global standards of competitiveness. The Travel & Tourism Development Index (TTDI) established by the World Economic Forum is a highly respected strategic benchmarking tool for measuring performance of tourism economies across the globe. It provides policymakers, businesses, and stakeholders with critical insights into the strengths and development

²² <https://en.people.cn/n3/2025/0109/c90000-20264044.html>

²³ www.gstcouncil.org/

areas of tourism economies worldwide, supporting efforts to enhance the growth and sustainability of the travel and tourism sector. The index serves not only as a resource for shaping policies and investment strategies but also as a platform for fostering dialogue on emerging trends, risks, and innovative models that promote resilience and long-

term sustainability in global tourism.²⁴

The figure below provides an overview of PRC's performance in 2024 when the country scored an impressive 8th globally bolstered by its strong reputation for safety and security as well as its world class Travel and Tourism Resources (e.g., rich and unique natural and cultural assets).

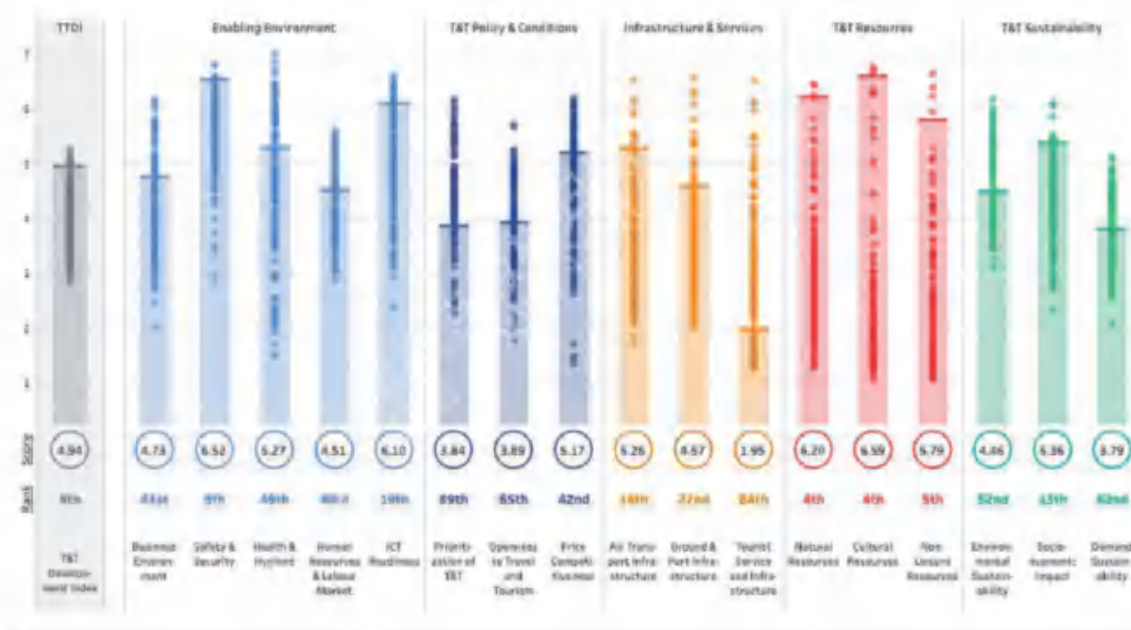


Fig. 50 – China's Rankings in the 2024 Travel and Tourism Development Index (TTDI)

The World Travel & Tourism Council (WTTC), in collaboration with Oxford Economics, conducts regular comprehensive assessments of Travel & Tourism's global economic, social, and environmental footprint. By compiling key data and indicators at global, regional, and national levels, this initiative provides valuable insights into the industry's far-reaching impact and enables countries to get a glimpse of their relative competitiveness in sustainability measures. This data-driven approach helps policymakers, businesses, and stakeholders make informed decisions to foster sustainable and

responsible tourism growth.

2.4 Strengths, Opportunities, Constraints and Risks

2.4.1 SWOT Analysis

The following table outlines the key Strengths, Weaknesses, Opportunities and Threats (SWOT) linked to mountain tourism in the Asia Pacific, all of which are outlined in previous sections of this report. This analysis is not intended to be exhaustive but rather focuses on high level issues.

STRENGTHS	OPPORTUNITIES
- Diversity of mountain landscapes and topographies - World's largest diversity of cultures and languages - Variety of mountain tourism experiences and activities available - Asia Pacific is home to many of the world's most significant faith-based monuments and attractions e.g. linked to Buddhism, Hinduism and Islam - Many Asia Pacific cultures - Asia Pacific is home to some of the world's most reputable hospitality cultures	- Tourists will continue to seek more relief in mountain tourism areas because of climate change impacting urban areas (heat island) - High speed technology adoption in Asia Pacific including AI and other digital technologies - Improve last mile access to mountain resorts through provision of eco-friendly transportation options originating at distribution hubs - Leveraging mountain tourism for people to people exchange, resulting in increased cultural understanding between people from different countries - International co-operation and exchange opportunities including sharing of good practice between Asia Pacific mountain tourism destinations - Identify new ways of measuring mountain tourism success - Provision of capacity building to SMEs e.g. in relation to utilising digital technologies including AI for promotions, business operations and customer satisfaction monitoring - Expand the aviation network in the Asia-Pacific region - Implement regional visa facilitation measures to stimulate tourism market vitality
WEAKNESSES	THREATS
- Marginal benefits to local communities - Variable safety often not meeting international standards - A shortage of skilled labour in mountain tourism, one of the impacts of which is inconsistent service quality due to lack of standards and training - Lack of understanding among service providers of visitor needs including (because providers have often not been tourists themselves) - Limited supply of potable water leading to dependency on plastic bottled water - Lack of reliable supply of fresh vegetables and protein leading to substandard and repetitive, import dependent, food and beverage offerings - Road dependent transport infrastructure leading to lack of eco-friendly last mile access - Poor transportation planning e.g. insufficient road infrastructure, carrying capacity and car dependency leading to overtourism, excessive carbon emissions and tourist dissatisfaction	- Volatile and unpredictable weather patterns because of climate change: - Shorter snow and skiing seasons in alpine destinations, leading to reduced revenues - Increased natural disasters e.g. flooding, landslides and mudslides - Global competition from established mountain tourism destinations with higher quality transport infrastructure e.g. eco-friendly public transport options and convenient flights - Rapid technological change and transformation - Public health threats including pandemic risks - Reduction in tourists' willingness to travel and spending power due to global economic uncertainty

Table 3 – SWOT Analysis Table for Mountain Tourism in the Asia Pacific

²⁴ World Economic Forum (2024). Travel and Tourism Development Index 2024.

2.4.2 Actionable insights

“If we make it more sustainable, mountain tourism will continue to demonstrate its capacity to generate activity, create jobs, reduce poverty, and enhance local culture, while adapting to the inescapable changes in the environment of our Planet”

-Francesco Frangialli, Honorary Secretary-General of UNWTO (UN Tourism now)



Actionable insights herein are derived from the SWOT and are intended to underpin the future development plan to be explained more rigorously in Chapter 3. Today, mountain tourism in the Asia Pacific continues to evolve. Advances in technology and transportation have made even remote regions accessible. Destinations like Nepal, Japan, and New Zealand attract millions of visitors annually, offering diverse experiences ranging from trekking and skiing to cultural tourism. However, challenges remain. Climate change poses a significant threat to mountain ecosystems, with shrinking glaciers and altered weather patterns impacting both natural beauty and local livelihoods. Over-tourism is another concern, as fragile mountain environments struggle to cope with increasing visitor numbers. To mitigate damage to natural environments by climate change and overtourism, it is imperative that mountain tourism activities in the region consider and integrate conservation through community-based ecotourism, responsible visitor management, and sustainable livelihood initiatives that incentivize preservation. This can include visitor caps in fragile areas, eco-certifications for tourism operators, and revenue-sharing models that reinvest tourism income into conservation and local development. By fostering public-private partnerships, leveraging indigenous knowledge,

and promoting conservation education, mountain tourism can be a force for both environmental protection and socio-economic resilience, ensuring that these landscapes remain thriving destinations for future generations. Efforts to promote sustainable tourism are gaining traction. Initiatives include community-based tourism in Himalayan villages, eco-lodges in Malaysia's highlands, and reforestation projects in degraded mountain areas.

2.4.2.1 Over tourism and climate change

Addressing the twin challenges of climate change and over-tourism requires a multifaceted approach. Stakeholders must prioritize sustainable tourism practices by promoting eco-friendly accommodations, supporting conservation efforts, and encouraging responsible travel behaviors. Policymakers should implement regulations and incentives to reduce the environmental impact of tourism, such as limiting visitor numbers in fragile ecosystems and investing in green infrastructure. Engaging local communities ensures their involvement in the preservation of cultural heritage while distributing economic benefits equitably. Travelers can contribute by choosing destinations and activities that prioritize sustainability and seeking out carbon offset programs to minimize their footprint. Addressing climate change and over-

tourism protects the environment and enhances the overall travel experience, fostering deeper connections between visitors and destinations.

2.4.2.2 Community-led Tourism for Pro-poor Development

Community-led tourism offers significant potential for pro-poor development, especially in mountain communities across Asia and the Pacific. Empowering local communities, particularly women and marginalized groups, is a key ingredient to tourism success, as their involvement ensures that tourism activities align with local cultural heritage and foster community ownership. To enable this, communities should be trained to conduct tourism asset mapping and develop experiences. Capacity in product development must be complemented with upgrades in marketing skills to help draw tourists who seek authentic and enriching experiences in mountain regions. Prioritizing community engagement not only promotes economic development but also enhances the overall well-being of the community, supporting the concept that a "good place to live is a good place to visit."

2.4.2.3 Digitalization of the Tourism Value Chain

Digitalization of the tourism value chain will support the sustainable growth of mountain tourism in Asia and the Pacific. By integrating advanced technologies, stakeholders can streamline operations, enhance service quality, and efficiently monitor environmental impacts. Digital platforms can facilitate seamless communication and collaboration between tour operators, accommodations, local communities, and tourists, leading to better resource management and customer satisfaction. Implementing data analytics and real-time monitoring systems can help predict tourist behavior, optimize resource allocation, and

minimize waste. Additionally, digital tools can play a crucial role in environmental impact monitoring and mitigation by providing accurate data on tourist activities, aiding in the development of sustainable practices, and supporting conservation efforts. The most notable AI applications that are being mainstreamed are large language models (e.g., DeepSeek and ChatGPT) that are revolutionizing communications and research. These will undoubtedly benefit tourism marketers in disseminating their produce value propositions. Overall, digitalization can transform the tourism value chain, driving growth while promoting sustainability and community well-being.

However, despite their benefits, the adoption of AI and VR in mountain tourism faces challenges. High implementation costs, technical expertise requirements, and digital infrastructure gaps in remote areas limit accessibility for some destinations. However, partnerships between governments, private enterprises, and international organizations can help address these barriers through funding, training, and technology-sharing initiatives. As the Asia Pacific region continues to embrace technological advancements, the integration of AI and VR offers a pathway to sustainable mountain tourism. By enhancing visitor experiences, optimizing resources, and protecting fragile ecosystems, these technologies ensure that tourism development aligns with environmental and community well-being. Their adoption will play a critical role in creating resilient, eco-friendly mountain destinations for future generations.

2.4.2.4 The role of IMTA

The International Mountain Tourism Alliance (IMTA) plays a pivotal role in the development and promotion of sustainable mountain tourism by convening stakeholders, producing comprehensive knowledge reports, and disseminating good

practices. By bringing together a diverse range of stakeholders, including governments, private enterprises, local communities, and environmental organizations, IMTA fosters collaboration and a shared vision for sustainable mountain tourism. Their knowledge reports provide valuable insights into current trends, challenges, and opportunities in the sector, helping stakeholders make informed decisions. Additionally, IMTA actively disseminates good practices and innovative solutions, promoting sustainability, cultural preservation, and economic growth. In the future, IMTA can support the tourism planning process by identifying carrying capacity limits for mountain destinations and suggesting alternative routes and attractions to

disburse tourism and avoid over-tourism in any single location. IMTA can also advocate for the development of voluntourism programs that contribute to advancements in local small-scale infrastructure, ensuring that the host community benefits from tourism activities. The IMTA may also establish a mountain tourism performance index to measure the efficiency and effectiveness of mountain tourism destinations in Pacific Asia. Through these efforts, IMTA will continue to make a valuable contribution to the overall enhancement of mountain tourism, ensuring that it is both environmentally responsible and beneficial to local communities.



Fig. 51 – International Mountain Tourism Alliance (IMTA) Headquarters (Source: IMTA)



Mount Huangshan · China
中国黄山

CHAPTER 3 STRATEGIC VISION AND RECOMMENDATIONS

3.1 A Sustainable Future for Mountain Tourism

Mountain tourism in the Asia-Pacific region offers immense potential, not only as a key driver of economic growth but also as a catalyst for sustainable development. This chapter aims to explore and provide recommendations tailored specifically to the mountain tourism industry, with a particular focus on the challenges and opportunities in the Asia-Pacific region, to ensure the long-term sustainability of mountain tourism in the area.

As the industry continues to evolve, the role of mountain tourism in promoting sustainable development becomes increasingly apparent. This sector has the capacity to balance economic growth with environmental preservation and cultural enrichment, thereby benefiting the mountain communities. To achieve this, it is essential to adopt a long-term vision that fosters resilience, inclusivity, and environmental responsibility. By focusing on these key principles, mountain tourism in the Asia-Pacific region can not only thrive but also set an example for other regions around the world. This chapter presents strategies for strengthening the sector, addressing current challenges, and securing a sustainable future for the Asia-Pacific mountain tourism.

3.1.1 Mountain Tourism Vision 2030

By 2030, mountain tourism in the Asia-Pacific region should stand as a global benchmark for sustainability, innovation, and inclusivity.

"Mountain Tourism Vision 2030" is one where thriving mountain communities benefit from

tourism while preserving their unique cultural and environmental heritage. Mountain destinations will not only be places of natural beauty but also hubs of responsible tourism, where travelers engage in immersive activities that honor and preserve local traditions and landscapes.

The integration of modern tourism infrastructure and technology with traditional cultural heritage will be seamless, ensuring that development does not come at the cost of authenticity. Enhanced connectivity and accessibility will be pursued with the utmost respect for ecological balance, leveraging sustainable transportation and digital solutions to enhance visitor experiences. Governments, businesses, and local communities will work in harmony to implement policies that mitigate environmental degradation and address climate change. Through strong regulatory frameworks and responsible business practices, tourism will be a resilient force capable of withstanding external shocks, from economic fluctuations to natural disasters. The future of Asia-Pacific mountain tourism will be defined by a commitment to innovation, conservation, and inclusive economic growth, making these destinations exemplary models of sustainable tourism worldwide.

Excessive growth in visitor numbers can strain fragile mountain ecosystems, leading to soil erosion, waste accumulation, and cultural dilution. Managing visitor numbers through zoning, capacity controls, and sustainable infrastructure investments is crucial. Policies should encourage "quality over quantity," promoting longer visitor stays and diversified tourism products that spread tourism activity throughout the year. Local authorities should establish tourism management frameworks that balance economic benefits with ecosystem protection.

3.1.2 Expected Outcomes/Goals

Key Outcomes	Description
Healthy Growth of Tourism Economy	Mountain tourism revenue will be distributed equitably, benefiting local communities while reinforcing the sustainability of local economy and the healthy growth of the tourism economy.
Low-Carbon Tourism Environment	Efforts will focus on reducing the carbon emissions of mountain tourism activities, protecting the eco-system and biodiversity, mitigating pollution, and ensuring responsible waste and water management.
Cultural Preservation & Inheritance	Indigenous and local traditions will be safeguarded through policies that promote authentic mountain cultural tourism and provide direct benefits to heritage custodians.
Resilience to Climate Change	Mountain tourism infrastructure and policies will integrate climate change responses, such as afforestation programs and disaster early warning mechanisms.
Enhanced Tourism Experience & Quality	More investments will be put into digital innovation technology, to improve infrastructure and tourism service quality, ensuring that visitors enjoy safe, educational, and immersive tourism experiences.

3.1.3 Guiding Principles

Mountain tourism strategies for the Asia-Pacific should be grounded in the following principles:

1 Sustainability – responding to the UN Sustainable Development Goals by integrating ecological preservation, cultural inheritance, and economic development, to strive for lasting, steady, and healthy progress of Asia-Pacific mountain tourism.

2 Collaboration – establishing a robust coordination mechanism that pools resources and strengths and enhances collaboration among governments, enterprises, and local stakeholders, to foster synergy, maximize complementary strengths, and achieve mutual benefits.

3 Quality-Oriented – prioritizing high-efficiency responsible tourism and shifting the focus

towards quality over quantity and scale by offering premium tourism products and services, to make Asia-Pacific mountain tourism more appealing and competitive.

4 Community-centered – ensuring local populations are primary beneficiaries of tourism development and driving community-wide progress by promoting local employment and increasing household income through tourism, allowing residents to share in the rewards of tourism growth.

5 Innovation – leveraging technology for enhanced experiences, management and monitoring, harnessing the power of artificial intelligence and other digital innovations to advance smart tourism services and refined operations, injecting fresh momentum into Asia-Pacific mountain tourism.



Fig. 52 – Guiding Principles for Mountain Tourism Development in the Asia Pacific

3.2 Strategic Recommendations

To realize the "Mountain Tourism Vision 2030," we must propose forward-looking and targeted strategies that combine shared understanding, pool resources, and break through bottlenecks. In doing so, we can ensure the steady progress of mountain tourism amid the complex global landscape and tap into its distinct value as a catalyst for sustainable development. Guided by these strategies, mountain tourism would continue to be the cornerstone of sustainability in the Asia-Pacific, bringing economic opportunities while preserving the unique natural ecosystems and cultural heritage of destinations.

As the world's only international organization dedicated to mountain tourism, the IMTA plays a leading role in advancing the global mountain tourism. To promote sustainable Asia-Pacific mountain tourism, IMTA must strengthen partnerships with authoritative bodies such as the UN Tourism and PATA to deliver real transformation. This will help the region stand at the forefront of in responsible and sustainable tourism development. Furthermore, The IMTA should conduct joint research and facilitate the exchange of best practices with specialized institutions such as the IUCN and the FAO, and coordinate investment and financing initiatives related to the Asia-Pacific mountain tourism, thus boosting the high - quality construction of this industry. Below are the suggested measures the IMTA could take with all stakeholders and partners to optimize the communication and collaboration mechanism and enhance the effectiveness of strategic synergy:

1. Establish a centralized digital platform for accurate and timely information access and improve data sharing efficiency and project management capacity.
2. Organize thematic events, forums, and workshops to foster knowledge exchange among members.
3. Develop clear, systematic, and actionable decision-making protocols and dispute resolution

mechanisms.

4. Implement intercultural communication training for stakeholders of diverse backgrounds to help them better understand one another, navigate cultural differences, reduce communication barriers, and improve cooperation efficiency.

From a broader perspective, numerous strategic recommendations deserve to be prioritized and integrated into the action agendas, work plans, event schedules, and external communications frameworks of relevant institutions in the Asia-Pacific mountain tourism sector. This report outlines 37 joint strategies for the stakeholders, including IMTA and its industry partners, covering six topics and offering a strategic support for the sustainable and high-quality development of Asia-Pacific mountain tourism.

3.2.1 Sustainable Destination Management (6 Strategies)

1. Formulate standards for the sustainable mountain tourism in the Asia-Pacific based on the best practices worldwide, to offer clear guidance for balanced development across ecological, social, and economic dimensions.
2. Work closely with international certification systems such as the GSTC, to design eco-friendly operation standards for Asia-Pacific mountain tourism, advancing a sector-wide shift toward greenness and sustainability.
3. Establish policy guidance for visitor capacity limits and destination zoning in sensitive mountain tourism areas in the Asia-Pacific, to scientifically assess carrying capacity, make targeted management strategies, and offer visitor flow guidance to mitigate the risk of overtourism.
4. Develop support programs for local mountain tourism enterprises based on UN Tourism guidance and successful global cases, encouraging residents to participate in tourism development and run tourism businesses with regional characteristics.
5. Develop localized service quality standards to

integrate the characteristics of Asia-Pacific mountain tourism, including local cultures, lifestyles, and traditions, into accommodation, catering, tour guidance, and activity design, while ensuring service consistency via quality assurance mechanisms.

6. Advocate for ecological protection, restoration, and beautification, leverage resources, and establish long-term partnerships with regional stakeholders to implement science-based ecological plans, such as afforestation, soil and water conservation, and biodiversity protection, to help restore mountain ecosystems, laying a strong ecological foundation for sustainable mountain tourism.

3.2.2 Climate Change and Response Strategies (6 Strategies)

1. Promote carbon-neutral tourism initiatives, share knowledge and the best practices via summits, seminars, and forums, learn from advanced technologies and management models worldwide, and encourage mountain tourism destinations in the Asia-Pacific to engage in international cooperation on climate change-related actions.
2. Enhance disaster early warning systems for climate-sensitive mountain areas by integrating meteorological, geological, and environmental data through current crisis communication and disaster prevention mechanisms; build a timely and accurate forecasting system via advanced monitoring technologies and data analytics to predict hazards such as heavy rainfall, floods, landslides, and avalanches.
3. Strengthen cooperation between mountain destinations and neighboring countries or regions via multi-stakeholder partnership mechanisms, to encourage information sharing, technology exchange, and joint actions for climate adaptation strategies, ecological conservation measures, and policy interventions to boost climate resilience.
4. Establish a "Carbon-Neutral Infrastructure Initiative for Asia-Pacific Mountain Tourism," invest in clean energy facilities, energy-efficient buildings, and green transport systems, carry out vegetation

restoration projects, and promote responsible resource consumption.

5. Develop climate mitigation and adaptation strategies and funding mechanisms throughout the Asia-Pacific, to encourage tourism enterprises to adopt clean energy, develop green products and services, and promote climate-friendly tourism.

6. Raise public awareness and responsibility of climate change and sustainability, promote civil, eco-conscious tourism behavior, and carry out training programs for tourism practitioners to effectively respond to climate change and sustainable tourism management.

3.2.3 Infrastructure Development and Smart Connectivity (5 Strategies)

1. Promote low-carbon transportation solutions for mountain tourism destinations (e.g., clean-energy shuttle buses and cable car systems), and draw on advanced experience from countries like China in renewable energy applications and eco-friendly solutions.
2. Advocate for and pilot integrated digital management systems for mountain tourism destinations, including building data indicator systems and other digital support services such as big data and cloud computing, to enable real-time monitoring and precise control of visitor flows; use smart navigation systems to offer personalized services for tourists, optimizing visitor management, improving feedback assessment, and enhancing interactive visitor experiences.
3. Apply international green building standards, such as LEED certification, to guide sustainable design and operation of mountain lodges and resorts and encourage more green building projects through policy incentives and financial support; establish supervision mechanisms to ensure that certified projects always meet standards and foster a shift toward green and environmentally friendly tourism architecture.

4. Advance technological innovation and cooperation, focus on the application of cutting-edge technologies such as artificial intelligence, robotics, and drones in mountain tourism, strengthen collaboration with research institutions and tech enterprises, and pool resources and expertise to apply smart technologies to mountain tourism, thereby boosting the innovation capacity and competitiveness of mountain tourism.

5. Promote accessible tourism infrastructure in mountainous areas, especially demonstration sites for barrier-free mountain tourism in the Asia-Pacific; build accessible pathways, wheelchair parks, aerial cableways, mountain elevators, and wheelchair lifts to address the travel needs of the elderly and people with disabilities, highlighting the inclusivity and human-centered care of mountain tourism.

3.2.4 Cultural Heritage Preservation (5 Strategies)

1. Work closely with national, provincial, and local cultural institutions, pool resources and strengths, and encourage indigenous communities to participate in the development of mountain tourism based on respecting and safeguarding their rights; integrate local cultures and traditions into the planning, design, and operation of tourism projects to create unique cultural tourism experiences, promoting both economic development and cultural inheritance.

2. Establish partnerships with organizations such as UNESCO and WTACH to jointly undertake research on cultural heritage preservation in Asia-Pacific mountain tourism, especially on heritage status assessments, conservation techniques, and sustainable use strategies.

3. Call on governments to improve cultural heritage protection policies by considering the cultural characteristics and development needs of Asia-Pacific mountain tourism, formulate stricter, more detailed, and targeted regulations and standards, pool international technical assistance and policy support, and work closely with UN Tourism, IUCN, FAO, and other international organizations to leverage

their expertise, technology, and funding to improve heritage conservation capacities and ensure effective policy implementation.

4. Promote educational and experiential cultural tourism, blend storytelling and immersive experiences, use modern technology and expert interpretation to reveal the stories and values behind cultural heritage, deepen visitors' understanding of local traditions, and foster their interest and participation in heritage protection.

5. Conduct comprehensive research on community culture and natural history resources, identify and evaluate culturally valuable tourism assets such as traditional crafts, local handicrafts, festivals, and historic sites via scientific methods, and develop targeted protection and development strategies, therefore tapping into their potential while striking a balance between cultural heritage protection and sustainable tourism development.

3.2.5 Capacity Building, Education, and Research (7 Strategies)

1. Carry out sustainability training programs for mountain tourism practitioners in the Asia-Pacific to support sustainable tourism operations and management.

2. Engage research institutions, universities, and tourism enterprises to jointly work on key issues, challenges, and trends in Asia-Pacific mountain tourism.

3. Collect successful planning, development, operation, and management cases from across the Asia-Pacific and the globe to build a best-practices database for Asia-Pacific mountain tourism, offer accessible information-sharing platforms for practitioners, researchers, and policymakers to support knowledge dissemination and industry-wide progress.

4. Build community-level information-sharing mechanisms to collect and analyze visitor feedback, improve tourism products and services based on feedback analysis, enhance visitor satisfaction, and

build regional tourism brands.

5. Establish international platforms to share knowledge and experience on mountain tourism among mountain destinations worldwide; consider publishing a quarterly or semiannual Asia-Pacific Mountain Tourism journal featuring articles by leading experts, scholars, and practitioners on emerging research, practices, and innovations.

6. Develop skill training programs for Asia-Pacific mountain tourism, covering tour guide, hotel management, language skills, business operations, marketing, ecological conservation, and other areas; combine coursework with practices to enhance professional competencies and improve workforce competitiveness in the sector.

7. Launch youth education initiatives on mountain tourism to raise awareness of mountain ecological conservation; organize volunteer programs, social practices, and innovation competitions to cultivate responsibility and agency among young people, encouraging them to contribute to sustainable tourism and innovation.

3.2.6 Policy and Governance Frameworks (8 Strategies)

1. Establish a regional cooperation mechanism for sustainable mountain tourism, leverage the leadership of the IMTA in policy advocacy and stakeholder coordination to call on Asia-Pacific countries to work together in policy formulation, resource sharing, and market development to jointly address challenges.

2. Initiate "Asia-Pacific Mountain Tourism" campaigns to integrate regional tourism resources and enhance public awareness, thereby improving the global visibility and reputation of Asia-Pacific mountain tourism.

3. Strengthen partnerships between governments, private sectors, and international organizations such as UN Tourism, IMTA, PATA, IUCN, FAO, and GSTC, establish mechanisms for regular

communication and cooperation to jointly carry out research, formulate standards, and promote sustainable tourism, pooling resources and strengths to enhance the global presence and sustainability of Asia-Pacific mountain tourism.

4. Introduce fiscal incentives to encourage responsible tourism investment, and use tax breaks, subsidies, and low-interest loans to guide capital toward projects with ecological, social, and cultural value.

5. Integrate tourism policy with national mountain tourism protection strategies backed by PATA's advocacy and industry networks. Improve coordination among tourism, environmental, cultural, and agricultural departments to better implement national development strategies and balance conservation with economic development.

6. Promote the adoption of international sustainability standards such as the GSTC criteria throughout the planning, development, and management of mountain tourism, minimize the ecological impacts of tourism activities, preserve authenticity and intergenerational sustainability, and establish fair benefit-sharing mechanisms to protect the interests of communities, businesses, and visitors alike.

7. Develop a tiered classification system for mountain tourism destinations by fully considering their unique ecological traits, resource endowments, and development stages; tailor management strategies to each classification, help destinations define personalized development paths, to improve tourism service quality and market competitiveness.

8. Commission independent expert teams to develop a monitoring framework for Asia-Pacific using scientific methods and advanced technologies; track progress, evaluate outcomes, identify issues, and provide solutions and recommendations for policymaking.

1

引言与背景

Mount Fuji, Japan
日本富士山

第一章 引言与背景

中国著名思想家孔子将山地视为美德、坚韧和精神升华的象征，并时常用“山”来阐述深刻的人生哲理。以下是孔子先生和其他中国古代人有关“山”的智慧名言：

“知者乐水，仁者乐山”；“登高使人思远，观山使人思德”；“千里之行，始于足下”……

本报告以这些名言为精神，探讨亚太山地旅游为何在全球范围内独具特色。

力于促进亚太地区的负责任和可持续旅游。PATA 成立于 1951 年，连接政府、旅游局、航空公司、酒店集团和学术机构，推动合作、提供行业研究并倡导可持续旅游实践；通过市场情报、能力建设计划和全球活动，帮助利益相关方应对行业趋势和挑战。PATA 在塑造亚太地区旅游与旅行的未来方面发挥着关键作用，确保其增长具有韧性、包容性与积极意义。

1.1 关于 IMTA 和 PATA



国际山地旅游联盟（IMTA）是经中国国务院批准成立，由山地旅游相关组织、团体、个人组成的非政府、非营利性国际组织。国际山地旅游联盟于 2017 年 8 月 15 日正式成立，以可持续旅游为目标，保护山地资源、传承山地文明、促进山地经济、造福山地民众为宗旨，致力于山地旅游资源的保护与利用，参与山地旅游治理体系的创新构建，促进旅游业界国际交往和业务合作，推广交流山地旅游发展的成功经验，促进山地经济繁荣和可持续发展。



亚太旅游协会（PATA）是一个非营利组织，致

1.2 研究目标

《亚太山地旅游发展报告》（以下简称“报告”）由国际山地旅游联盟（IMTA）和亚太旅游协会（PATA）联合编写，旨在全面分析全球和区域趋势，推动山地旅游的可持续发展。报告探讨了山地旅游目的地的多样化景观，考虑了其独特的地形地貌、环境气候、文化遗产和产品供应。通过识别山地旅游发展的机遇和制约因素，为政策制定者、行业利益相关方和旅游运营商提供最佳实践案例，洞悉新兴挑战。报告将展现亚太山地旅游的实际案例及创新举措。

1.3 研究的性质与范围

报告研究范围中重点探讨了运用人工智能（AI）等创新技术推动山地旅游可持续发展，提升游客体验，同时保护脆弱的山地生态系统。报告还强调后疫情时代的经验教训，帮助利益相关方适应日益变化的市场需求，保持山地旅游的韧性发展和价值增长。报告考察了全球和亚太地区山地旅游的表现和影响，重点关注游客到达量、创收和就业创造等指标。此外，在分析基本绩效指标的基础上，报告进一步探讨了旅游是否通过提升真实旅游体验，推动

文化交流和可持续发展，真正惠及包括游客、当地社区、企业、员工和环境资源在内的所有利益相关方。与传统的旅游指标主要关注游客数量和经济影响不同，有意义的旅游以质量、可持续性和互惠作为衡量其成功的标准。平衡东道主和游客的利益需要社区参与旅游规划、公平的经济分配以及负责任的游客行为。“宜居之地即宜游之地”的理念强调了确保旅游提升当地生活质量、保护文化遗产和自然景观的重要性，以实现目的地对游客的吸引力，并保障居民福祉的可持续发展。

1.4 研究方法

《亚太山地旅游发展报告》由亚太旅游协会（PATA）和国际山地旅游联盟（IMTA）组织的专家团队联合编写，为期六个月（2024 年 11 月至 2025 年 5 月）。全球和区域旅游统计数据参考了亚太旅游协会（PATA）和联合国旅游组织（UN Tourism）定期发布的年度统计报告及预测。同时，对已发表的文献和灰色文献进行了梳理，并通过网络研讨会活动与全球专家开展咨询，以获取战略洞

见。除附录 1 中的参考文献列表外，报告全文还附有相关脚注。

项目分为两个阶段，通过每个阶段收集见解并制定促进亚太地区山地旅游可持续发展的战略建议。

第一阶段：研究与现状分析（2024 年 11 月—2025 年 2 月）

初始阶段侧重于案头研究（二手资料研究法），旨在审阅全球山地旅游的发展趋势与最佳实践。2025 年 1 月 22 日举办的专家网络研讨会对这一研究起到了补充作用。在此次研讨会上，专家小组就亚太地区山地旅游发展所面临的机遇与制约因素展开了讨论。逾 60 位与会者参与了此次网络研讨会，他们的见解丰富了研究过程。附录 2 提供了参与咨询的人员完整名单。本阶段的研究结果已整合为一份《形势分析报告》，该报告针对以下关键问题进行阐述：

- （1）我们身处何地？——分析亚太山地旅游的现状。
- （2）我们向往何方？——辨析可持续发展未来面临的机遇与挑战。

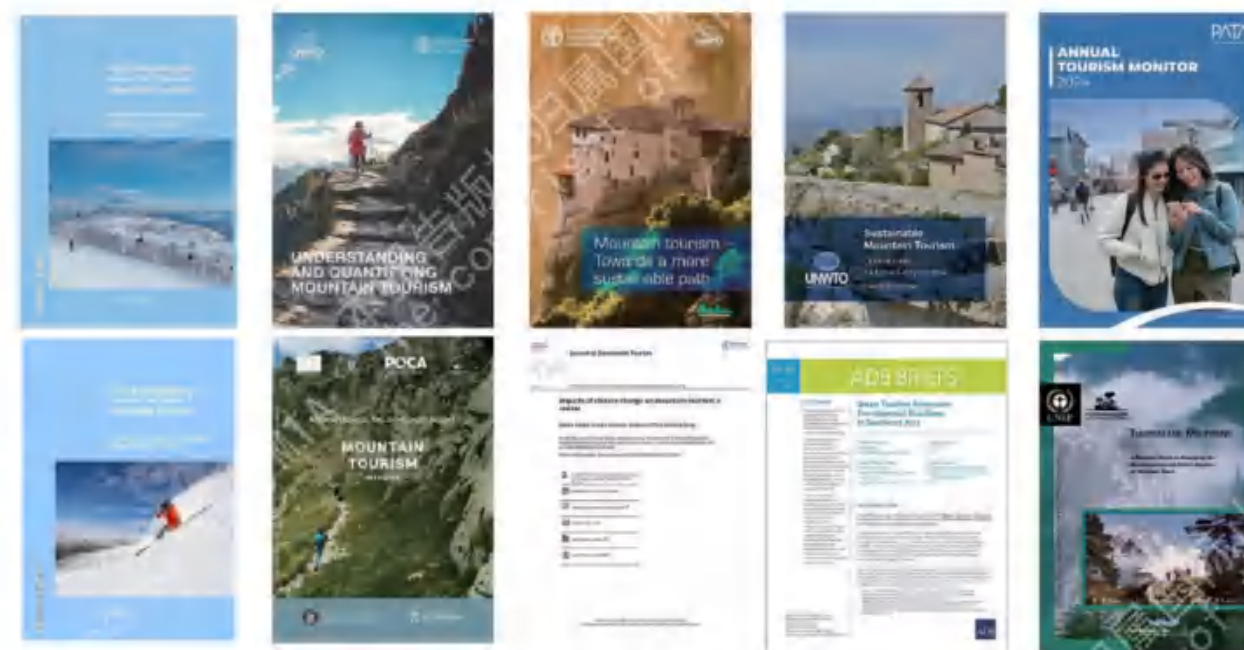


图 2—为本报告所查阅的全球山地旅游重要报告文献

第二阶段：战略与行动计划（2025 年 3 月—5 月）

基于第一阶段的研究成果，第二阶段着重制定切实可行的建议，用以指导可持续山地旅游的未来发展。该行动计划针对关键问题展开：

我们如何达成目标？——勾勒出国际山地旅游联盟（IMTA）、亚太旅游协会（PATA）、联合国世界旅游组织（UN Tourism）及其他旅游组织在促进亚太地区可持续且具韧性的山地旅游发展方面的战略合作路径。

这种结构化方法确保了报告能够汲取专家见

解、利益相关者的意见，为推动山地旅游发展指引战略方向。如前文所述，本报告还参考了大量亚太地区山地旅游及旅游业相关的重要文献，并在文末参考文献处列出。

1.5 报告结构

《亚太山地旅游发展报告》分为三章，第一章为引言；第二章为报告主体部分，对山地旅游发展形势进行分析；第三章则提出战略建议，为亚太山地旅游的发展提供建设性、技术性指引。



图 1—亚太旅游协会邀请山地旅游专家展开网络研讨会



Mountain Lagoon, Philippines
菲律宾山地大泻湖

2

形势分析

第二章 形势分析

2.1 2019 - 2030 年旅游概况

全球旅游业正涌现出多种新兴趋势，这些趋势正在重塑全球旅游业格局，无疑也将对亚太地区的山地旅游产生影响。

2.1.1 旅游表现（全球及亚太地区）

山地旅游作为全球旅游业的关键组成部分，为世界各地带来了显著的经济效益。凭借其独特魅力，山地旅游在推动国际游客到访、增加旅游收入以及创造就业机会等方面发挥了重要作用，在欧洲、美洲地区的表现尤为突出，而在亚太地区的影响力亦日益增强。从全球范围来看，山地旅游约占国际游客到访总数的9% - 16%。依据联合国旅游组织（UNWTO）2021年的数据，每年山地旅游游客量约有3.75亿人次，这充分显示出山地旅游目的地的多元吸引力，能够满足游客在探险运动、生态旅游以及文化探索等多方面的需求。全球山地旅游产业呈现出良好的发展态势，年增长率约达6.5%，在全球旅游活动中的占比高达15%，其重要性不言而喻。

从区域来看，欧洲和美洲在全球山地旅游市场中占据主导地位，山地旅游游客量占其国际游客到访总数的比例高达17%。欧洲的阿尔卑斯山脉和北美的落基山脉等知名山脉，凭借其成熟完善的基础设施、丰富多样的冬季运动项目以及深厚的文化底蕴，持续吸引着数以百万计的游客。亚太地区紧随其后，山地旅游游客量占该地区国际游客到访总数的比例亦可达17%，同时全球约17%的山地旅游活动集中于该地区。得益于喜马拉雅山脉、新西兰的南阿尔卑斯山脉以及日本和印度尼西亚的火山地貌资源等，亚太地区在全球山地旅游市场中展现出显著的竞争优势。然而长期以来，基础设施建设和可持续发展实践的提升仍是亚太地区面临的严峻挑战，也是充分挖掘其山地旅游发展潜力的关键。¹

2.1.1.1 游客到访量

2019年全球国际游客到访量在新冠疫情暴发前创下15亿人次的历史峰值。受疫情影响，2020年全球到访量骤降至4.07亿人次，2021年虽略有回升至4.58亿人次，但仍导致超过1.4亿旅游业从业人员（占行业总就业人数的43%）失业，旅游业出口收入较2019年峰值（1.7万亿美元）下降60%。随着各国旅行限制政策逐步解除，2023年全球旅游业呈现强劲复苏态势，2024年持续保持增长动能。预计在2025年，国际游客到访量将恢复至疫情前水平，入境人数有望达到15亿，旅游收入预计将接近2万亿美元。中国将成为推动全球旅游业复苏的主要客源市场，预计2025年出境游规模达1.3亿人次（恢复至疫情前水平的90%）；美国出境游规模预计为8000万人次，其次是德国（4000万人次）、英国和印度（各3000万人次）。根据联合国旅游组织（UN Tourism）长期预测，到2030年全球国际游客到访量预计将攀升至18亿人次。

亚太旅游协会（PATA）预测，到2026年，亚太地区的国际游客到访量将突破9亿人次，旅游消费规模预计将接近1万亿美元。如果将境内旅游流动纳入统计，消费总值有望接近2万亿美元。

¹ United Nations Environment Programme & World Tourism Organization (2007). Tourism and Mountains: A Practical Guide to Managing the Social and Environmental Impacts of Mountain Tours. UNEP & UN Tourism, 2007.

然而，预计到 2027 年，区域或全球危机将导致国际游客到访量有所下降（如下图）。

2.1.1.2 收入情况

总体而言，山地旅游收入占全球旅游收入的 20%，这一比例凸显了其在更广泛的旅游业经济中

的关键作用。除了旅游人次外，山地旅游目的地还通过旅游有关收入带来可观的经济效益。前往山区的游客，通常参与滑雪、徒步旅行和文化远足等高附加值活动，为当地企业开辟了新的收入渠道。此外，通过推广和销售手工艺品、手工食品等山区社

Forecast of visitor arrivals into Asia Pacific 2025 - 2027, by Scenario

PATA



图 3 - 亚太旅游协会对 2025 - 2027 年亚太区旅客入境人数的官方预测

区独有的文化产品，进一步提升山地旅游经济收益。这些充满地域特色的商品吸引了追求真实体验的国际游客，推动了旅游业与当地产业的共生发展，既巩固了乡村经济基础，又推动了区域整体发展。

2.1.1.3 就业情况

就业方面，据世界旅游及旅行业理事会（WTTC）估算，2024 年全球共有 3.48 亿人从事旅游相关工作，其中亚太地区占比高达 52%，约 1.81 亿人。山地旅游作为推动就业的重要引擎，尤其在就业机会原本有限的偏远及农村地区展现出独特价值。该行业直接创造了大量岗位，涵盖酒店住宿、旅游运营及交通服务等领域，同时通过农业、

手工业和基础设施建设等与旅游需求紧密相关的产业，带动间接就业蓬勃发展。这一效应在亚太地区尤为突出，例如尼泊尔、印度、不丹等国的旅游业快速增长，成为山地社区的经济命脉。以尼泊尔安纳普尔纳环线为代表的徒步路线热潮，带动了向导服务、住宿接待及配套服务等就业岗位的大幅增长。

2.1.2 全球主要旅游趋势及其对亚太地区山地旅游的影响

2.1.2.1 可持续旅游和可持续发展目标（SDGs）

联合国旅游组织（UN Tourism）将可持续旅

游业定义为“充分考虑当前及未来经济、社会和环境影响的旅游形式，满足游客、行业、环境和当地社区的多方需求”。需求侧数据显示，83% 的游客倾向于选择可持续旅游产品，然而仍有 49% 的游客认为当前可持续旅游产品的供给不足。² 目的地管理组织和在线旅行社敏锐捕捉到这一趋势，正加大可持续旅游实践推广力度。中国已成为可再生能源技术的全球领导者，并在各个领域达成了瞩目的里程碑。2024 年，中国的风能和太阳能装机量达到了创纪录的 357 吉瓦，提前并超额完成原定于 2030 年达成的 1200 吉瓦的目标。这一飞速发展大幅提升了清洁能源在中国发电总量中的占比，可再生能源发电占比达到 44%，煤炭占比则降至历史新低的 53%。在电动汽车市场，中国持续领跑全球，预计到 2030 年，仅电动自行车市场规模就将达到约 4020 万辆。这些进展充分彰显了中国推动全球可持续能源转型的坚定承诺。

COVID-19 大流行引发了关于旅游业未来的新讨论，突显了践行负责任旅游行为和遵守可持续性原则的必要性。1980 年至 2019 年间，全球旅游业经历了快速扩张，整体规模增长五倍，虽然带来了显著的经济效益，但也伴随着严峻挑战。以大众旅游模式为例，人满为患的海滩、拥挤不堪的游轮以及千篇一律的全包式度假村，不仅削弱了主客互动质量，也损害了文化原真性，并对当地资源和环境造成压力。在许多旅游目的地，这种不加节制的增长致使游客满意度下滑，甚至引发了当地社区的抵触情绪。

这一时期的反思突显出旅游业发展模式亟需根本性转变。人们对“过度旅游”担忧的增加，揭示了行业内的结构性问题。旅游业形象已从“提供娱乐、促进就业和文化交流”，逐渐转变为与过度拥挤、环境退化和身份认同丧失相关联的负面形

象。在某些群体中，曾被视作富有冒险精神的全球旅行，如今却被赋予了道德责任甚至愧疚的情感色彩。这些趋势表明，旅游业亟需重新定义“成功”的标准，不应仅以游客数量作为衡量依据，而应注重游客体验质量、当地社区福祉，以及自然文化资产的保护。³

亚太山地旅游部门可通过优先发展更具意义的旅游模式，采用更为平衡的发展路径，强化主客互动关系、支持地方经济，并维护环境与文化完整性。实现这一转变，离不开创新政策、负责任的商业行为，以及旅游价值链各方对可持续发展的共同承诺。有意义的旅游模式弥补了现有可持续性框架（如可持续旅游、负责任旅游、再生旅游、绿色增长旅游、去增长旅游、稳态旅游和循环经济旅游等）的关键不足。该模式整合积极心理学与积极可持续性理论，采用系统性方法构建关键绩效指标（KPIs），确保在地社区、企业、游客及环境等所有利益相关方均能从中获益。这一前瞻性模型为旅游业可持续发展提供了更具包容性、可量化且富有影响力的实践路径。

亚太地区的可持续旅游发展正逐步对齐联合国可持续发展目标（SDGs）的全球承诺。山地旅游凭借其丰富的环境、文化和社会维度，通过推动生态保护、减贫脱贫与文化遗产，为推进可持续发展提供了独特机遇。通过践行可持续理念并与可持续发展目标深度协同，山地旅游可为游客与当地社区创造双向正向影响，确保长期效益。

在当前可持续旅游实践中，在线旅行代理商正逐步展示第三方机构认证的多维度可持续资质，包括低碳排放目的地认证及以减少、循环和消除废弃物为目标的循环经济系统。自 2015 年以来，联合国 193 个会员国中有 191 个已承诺实施《2030 年可持续发展议程》及其 17 项可持续发展目标。尽

2 Booking.com (2024). Sustainable Travel 2024.

3 International Mountain Tourism Alliance (2023). Report on Development Trend of World Mountain Tourism.



图4- 联合国旅游组织的“旅游促进可持续发展目标”模式

管旅游业具备直接或间接促进全部 17 项目标的潜力,但其在目标 8(促进包容和可持续的经济增长)、目标 12(可持续消费和生产模式)及目标 14(保护和可持续利用海洋和海洋资源)中的作用尤为突出(见图 1)。2023 年,联合国重申将旅游业作为推动疫情后包容性增长的重要抓手,倡导实施支持教育、就业创造与性别平等的战略性政策。2025 年,联合国统计委员会新增旅游业就业的全球数据作为补充指标,系统化衡量旅游业对实现可持续发展目标的贡献。此举使官方旅游类可持续发展目标指标由两项增至三项,提升了该行业对全球经济与社会进步所作贡献的可见度。另外两项旅游指标分别衡量旅游业直接 GDP 占总 GDP 的比重

及其增长率,以及用于监测旅游可持续性经济与环境维度的标准化核算工具实施情况。⁴

亚太地区在制定山地旅游战略时,日益重视与可持续发展目标(SDGs)的深度对接,重点聚焦环境可持续性(目标 13:气候行动)、减贫(目标 1:消除贫困)以及可持续经济增长(目标 8:体面工作与经济增长)。该地区旅游业利益相关方致力于确保旅游经济效益直接惠及在地社区,同时保护自然资源与文化遗产。例如,尼泊尔通过社区主导的徒步旅行项目,使当地居民能够通过为游客提供向导服务、住宿和餐饮获得收入。此类举措在促进山地景观可持续利用的同时,有效缓解了经济不平等现象。



图5- 可持续发展目标(SDGs)8、12和13及其与旅游业的联系

SDG #	SDG 名称	SDG 聚焦	对山地旅游的影响	机会
8	体面工作与经济增长	促进可持续经济增长、就业和人人有体面工作。目标包括: ●实现所有人的充分和生产性就业; ●结束现代奴役、贩运和童工; ●加强国内金融机构的能力。	山地旅游有助于在农村和边远地区创造就业机会,缩小区域差距,鼓励当地创业。然而,挑战包括季节性就业和潜在的剥削。	发展以社区为基础的旅游倡议,促进公平贸易旅游做法,加强当地人的技能建设方案,并与金融机构建立伙伴关系,以支持可持续的旅游相关业务。
12	采用可持续的消费和生产模式	确保可持续的消费和生产模式。目标包括: ●到 2030 年实现自然资源的可持续管理; ●到 2030 年将全球人均食物浪费减半; ●减少化学品和废物释放到空气、水和土壤中; ●到 2030 年大幅减少废物产生。	如果管理不善,山地旅游可能导致自然资源的过度开发、废物增加和环境退化。然而,若规划得当,它也为保护和促进环保实践提供了机遇。	鼓励生态旅游,实施废物管理系统,促进可再生能源的使用,并让游客和企业参与保护项目。
13	气候行动	采取紧急行动应对气候变化及其影响。目标包括: ●加强应对气候变化相关灾害的能力; ●将气候变化措施纳入政策和规划; ●执行《联合国气候变化框架公约》(UNFCCC)。	山地旅游业极易受到气候变化的影响,气温上升会影响积雪、生物多样性和水资源。同时,它为提高对气候变化影响的认识提供了一个平台。	促进适应气候变化的基础设施建设,制定以气候变化为重点的教育旅游计划,并将可持续实践纳入旅游规划和管理,以减轻环境影响。

表1- 与可持续发展目标(SDGs)8、12和13相关的旅游影响和机遇

4 UN Tourism (2025). UN adopts new tourism employment indicator to guide efforts towards the SDGs.

案例研究

珠穆朗玛峰上的废物回收（尼泊尔）

关键问题

珠穆朗玛峰作为世界最高峰，长久以来被视为冒险与探索精神的象征。然而其盛名背后潜藏着沉重的环境代价。每年约 1,200 名登山者与夏尔巴向导尝试登顶，由此产生的固体废弃物总量惊人。自 1953 年人类首次成功登顶以来，峰区已累积逾 50 吨垃圾，包括氧气罐、塑料瓶、食品包装及废弃登山装备。每位登山者年均产生 8-12 公斤废弃物。

在国家层面，尼泊尔面临系统性垃圾治理困境，城市区域每日产生约 3,200 吨垃圾，其中多数最终进入河流与露天填埋场。珠峰垃圾危机实为该国环境治理现状的缩影，折射出旅游业环境影响与基础设施承载力不足的结构性矛盾。峰区遗留垃圾主要由以下四类构成：

- 饮用水及饮料塑料容器
- 铝箔包装、速食面容器等食品包装材料
- 废弃帐篷、登山绳、氧气罐等专业装备
- 具有环境与健康风险的人类排泄物

此类混合型垃圾因其非生物降解特性及极端海拔环境下的收集难度，在处置与循环利用方面构成严峻技术挑战。

解决方案

为应对珠峰的垃圾危机，多项创新性可持续治理方案已提出并付诸实施：

- 建立登山垃圾强制回收激励机制：尼泊尔政府规定，每位登山者须携带至少 8 公斤垃圾下山，达标或超额完成者可获得每公斤 1-3 美元奖励。该政策通过经济激励促使登山者规范处理垃圾，强化社区共治参与；

- 实施垃圾资源化再生工程：废弃氧气罐、塑料制品等经技术处理被转化为特色手工艺品及装饰构



图 6-1 尼泊尔的一个山地垃圾收集站（图源：iStock 图片库）

件，通过创意升级再造实现垃圾减量与资源化利用的双重目标；

- 推行环保型纪念品消费替代计划：政府鼓励购买由本地再生材料制作的纪念品，以替代传统进口旅游商品。珠宝、艺术品、家居摆件等文创产品兼具生态教育功能，成为珠峰环境保护的具象化载体；

- 就业促进机制：升级再造产业链为当地社区创造就业岗位，实现可持续旅游业与民生改善的协同发展。手工作坊和小微企业不仅为尼泊尔工匠提供经济来源，更成为推广环境友好型实践的示范平台。相关举措同步开展垃圾分类管理教育，推动形成环境治理的长效参与机制。

在另一案例中，不丹通过实施“高价值、低影响”（High Value, Low Impact）的旅游模式，限制游客数量，强调惠及当地社区与环境保护，打造高品质旅游体验，有效契合可持续发展目标。

案例研究

不丹的山地旅游——可持续发展的典范

不丹地处喜马拉雅山脉东段，通过平衡生态保护与文化遗产，已成为全球可持续旅游的典范国家。该国实施“高价值、低影响”政策，通过政府、私营部门与当地社区的协同合作，确保旅游业的负责任发展。

不丹山地旅游的核心特征

- 制度协同：不丹旅游局制定质量标准，环境部门与村社合作社共同参与决策；
- 旗舰产品：25 天徒步线路“雪人步道”横跨 11 处高海拔山口，串联喜马拉雅偏远村落，展现原始自然景观；
- 生态管控：执行“无痕山林”原则，限定年度徒步者数量，保护脆弱生态系统；
- 资金投入：旅游业资金投入吉格梅·多吉国家公园与旺楚克百年国家公园等保护区的生态维护工作中。

可持续旅游的效益体系

- 经济增长：雪人步道为偏远社区创造收益来源，居民通过家庭旅馆、传统餐饮和向导服务获得收入；
- 文化存续：游客可体验保留完好的传统手工艺、节庆仪式与宗教习俗；
- 环境保护：控制游客数量以减轻自然资源压力，而保护性措施则有效维护生物多样性；

- 设施改善：旅游收入支持社区学校建设、医疗设施升级与净水工程实施。

挑战与可持续发展举措

- 运营挑战：高海拔环境与多变天气构成管理难题，需政府与社区协作维护徒步路线安全性；
- 能力建设：旅游局开展向导急救培训，改善背夫装备配置，提升服务安全性与可持续性；
- 平衡机制：通过政策设计，确保旅游规模增长不损害生态完整性及文化原真性。

成果与展望

不丹模式确保“雪人步道”提供卓越徒步体验的同时，促进生态效益与社区福祉。通过严格执行旅游规制、深化在地参与机制，不丹持续为全球山地旅游可持续发展树立标杆。



图7-不丹的“雪人徒步”之旅（图源：National Geographic and Ben Clark）

2.1.2.2 气候变化

全球有超过 6.71 亿人口（约占全球总人口的 10%）居住于高山地区。这些社区的生计高度依赖山地旅游，因此极易受到气候变化、地缘政治动荡及技术颠覆等外部冲击的影响。

气候变化对旅游目的地构成了生存性威胁，频繁发生的极端天气与灾害事件正在改变旅游行为模式。当前高温目的地需求下降，而凉爽地区的吸

引力上升，这一趋势预计将加速发展，亚洲山地旅游目的地将显著受益。然而，若未能有效应对气候与灾害脆弱性，旅游地可能面临游客人均消费下降及安全形象受损的风险。⁵

亚太地区拥有全球标志性山地景观，但其应对气候变化的能力正日益减弱。从喜马拉雅山脉到南阿尔卑斯山脉，气温上升、冰川消融及自然灾害频发正对山地旅游构成严峻挑战。这些影响不仅威胁

到旅游业活动本身，还对支撑该行业的生态系统、基础设施及社区构成了严重风险。

由于脆弱的生态系统且对稳定气候模式的依赖，亚太山区对气候变化尤为敏感。气温上升加速冰川消融，改变生态系统，并导致雪崩、山体滑坡及洪水等灾害频发。例如，喜马拉雅山脉冰川质量显著下降，影响水资源供给及依赖冰雪的旅游活动。此类脆弱性不仅威胁生物多样性，更危及热门旅游目的地的安全性与可达性。⁶

自然灾害进一步加剧了挑战。2015 年尼泊尔地震表明，基础设施损毁与安全风险认知将导致旅游业长期衰退。此类灾害往往使依赖旅游的本地经济陷入数月甚至数年的停滞状态。⁷

对冬季山地旅游的影响

冬季旅游作为山地经济支柱，对气候变化高度

敏感。滑雪场运营依赖天然降雪，但由于气温上升，亚太地区的降雪量持续减少。低海拔雪场尤为脆弱，许多雪场已被迫关闭或缩短运营周期。日本、新西兰等国的高海拔大型雪场通过人工造雪技术缓解降雪不足，但其经济成本与环境代价高昂——人工造雪需消耗大量水能与电力资源。⁸

对夏季山地旅游的影响

在冬季旅游面临降雪减少的同时，夏季山地旅游也在气候变化影响下发生重构。气温上升导致低海拔徒步与登山活动的舒适度下降，游客需求可能向高海拔转移。然而，强降水与极端天气事件导致山洪、步道损毁及滑坡风险上升，威胁基础设施与游客安全。部分地区因此游客锐减，夏季旅游经济的可持续性受到冲击。⁹

案例研究

黑龙江省克服极端天气与偏远区位挑战，实现蓬勃发展

黑龙江省地处中国东北部，省会哈尔滨市，是中国纬度最高、冬季最严寒的省份。这片被誉为“白色秘境”的土地，凭借冰雪大世界和滑雪节享誉全球。俄式建筑群、原始森林、火山地质公园与极光奇观构建了独特的人文与自然景观体系。得益于漫长的雪季和稳定降雪，该省拥有国内顶尖的滑雪设施集群，主要滑雪目的地包括：

- 亚布力国际滑雪场——中国规模最大、设施最完善的滑雪度假区
- 帽儿山滑雪场——提供适合各水平滑雪者的全维度教学体系
- 大青山滑雪场——以景观美学与适滑性著称的山地运动中心

夏季山地旅游呈现差异化发展格局：

- 五大连池世界地质公园——火山堰塞湖与熔岩台地构成的地质博物馆

6 International Union for Conservation of Nature (2024). Preserving Our Peaks: a call for urgent action to protect mountain ecosystems.

7 Food and Agriculture Organization and UNWTO (2021). Mountain Tourism: A More Sustainable Pathway.

8 International Mountain Tourism Alliance (2024). Mountain tourism destinations responding to climate change.

9 IBID IMTA 2024.

5 Food and Agriculture Organization and UNWTO (2021). Mountain Tourism: A More Sustainable Pathway

- 大兴安岭——生物多样性丰富的原始森林生态系统
- 帽儿山国家森林公园——多级登山步道与全景观景平台
- 凤凰山国家地质公园——云雾缭绕的断崖绝壁景观体系



图 8—中国大兴安岭地区风景（图源：ibaotu.com）

此外，省会哈尔滨的冰雪节和俄罗斯风格建筑吸引了大量游客。

关键挑战与风险因素

黑龙江山地旅游面临复合型气候挑战。极端低温（-30℃以下）对游客生理耐受构成考验，季节性冰雪导致的交通阻断与安全风险持续存在。气候变化进一步加剧系统脆弱性，雪季缩短、降雪量波动及冻融循环频发，均对滑雪产业可持续运营构成威胁。夏季适游期受限于短暂的温暖季节，大兴安岭等偏远区域面临林火风险升级与基础设施瓶颈，突出表现为交通网络稀疏、应急救援能力不足等问题。尽管亚布力等核心区设施相对完善，多数乡村景区仍存在服务标准缺失与多语言支持短板等问题。



图 9—哈尔滨冰雪节（图源：pexels.com）

现行应对策略

管理部门通过基础设施升级与气候适应措施构建韧性体系。主要枢纽站点配置供暖庇护所、防寒装备租赁系统及低温安全培训体系。新型应急救援协议、雪崩风险评估系统与智能监测网

络协同缓解气候风险。道路防冻改造、防滑步道与气象预警系统提升可达性。为延长旅游周期，地方政府着力开发山地自行车、激流漂流、林相观光与地热温泉等四季产品，推动单季模式向全季运营转型。高铁网络加密、支线机场扩建与高速公路延伸持续改善区域联通性，景区接驳电动巴士与雪地摩托等低碳交通工具形成立体交通网络。旅游设施升级涵盖生态旅居、野奢营地及双语服务体系，人工智能翻译、无现金支付等智慧服务提升体验质量。远程医疗系统、直升机救援网络与气候适应性诊所构建全域健康保障体系。

未来发展潜力

在气候风险加剧背景下，黑龙江山地旅游仍呈现强劲发展动能。气候适应性基础设施投资与产品多元化战略巩固其国家级冰雪运动基地的地位。温泉康养与生态研学等夏秋产品有效补足冬季运营空窗，智慧旅游工具与可持续实践标准提升服务能级。随着区域联通性增强及气候适应能力提升，黑龙江省正加速转型为全季候山地旅游目的地，在气候变化背景下探索出一条特色发展路径。

对山地生态系统和生物多样性的影响

气候变化正在打破山地生态系统动植物群原有的微妙平衡。气温上升与积雪减少导致入侵物种扩散，迫使本土动植物栖息地萎缩。例如，喜马拉雅山脉的高山生态系统面临显著的生物多样性流失，依赖特定气候条件的物种生存受到威胁。冰川消融作为亚太地区的关键问题，不仅影响水资源供给，还破坏生态系统稳定性。随着淡水资源减少，野生动物与人类争夺水源的冲突可能加剧，进一步削弱山地旅游的可持续性。

自然灾害和基础设施破坏

气候引发的自然灾害频发，如山体滑坡、冰川溃决洪水、冻土融化等问题，对山地旅游基础设施构成重大威胁。热门徒步路线、桥梁及旅舍的稳定性下降，频繁面临修复或改道的需求。此类中断不仅推高了基础设施维护成本，也因安全隐患降低了游客出行意愿。在尼泊尔等地区，基础设施的损毁已造成经济损失，并削弱了主要旅

游目的地的可达性。

地方社区面临的挑战

气候变化也为亚太山地社区带来经济挑战。降雪减少、自然灾害频发及自然资源退化正威胁传统农业与旅游生计。依赖山地旅游的社区必须适应变化，否则将面临经济衰退。部分社区需转向替代收入来源，但缺乏资源、培训及基础设施支持使转型困难重重。对某些社区而言，迁移可能成为唯一选择，从而导致文化流失与原住民身份消解。

水资源短缺与资源紧张

冰川消融与季节性降水失衡导致山地地区水资源短缺，影响当地社区及旅游活动，尤其是依赖雪上运动或游客淡水供应的区域。为维持运营，滑雪场日益依赖人工造雪技术，但此举进一步加剧了有限水资源的压力。在许多地区，旅游业与当地居民之间围绕水资源的竞争不断加剧，凸显可持续水资源管理实践的重要性。

“宜居之地，即是游览胜地”

——加拿大温哥华前首席规划师 Brent Toderian

2.1.2.3 过度旅游

随着全球旅游业在后疫情时代的复苏，过度旅游问题再度引发关注。尽管旅游业为旅游目的地带来就业与收入增长，但许多城市及脆弱遗产地也因此面临过度拥挤的压力，难以应对垃圾收集处理、供水与污水处理等公共服务需求的激增。管理对策包括限制游客数量、实施热门景点预约分时段入场制度、提高税费以抑制需求，从而缓解过度旅游造成的环境与社会负面外部性。¹⁰ 中国在应对过度旅游的技术解决方案开发方面处于领先地位，鉴于其 14 亿人口的庞大规模及强劲的国内旅游需求，过度旅游问题自现代旅游业兴起之初便成为挑战。



图 10-山区过度旅游（图源：IMTA 提供）

亚太地区拥有多样且壮丽的山地景观，但正面临日益严峻的过度旅游压力。随着山地旅游目的地热度攀升，旅游活动对脆弱生态系统、文化遗产及本地基础设施施加的压力日益加剧。本节探讨该地区过度旅游所带来的环境与文化影响，并强调可持续解决方案的必要性。山地生态系统对旅游活动尤

为敏感，过度旅游加剧了山地环境的破坏程度。游客数量激增导致自然资源过度消耗、栖息地损毁，以及因交通、住宿与游览活动产生的污染。在尼泊尔珠峰大本营（Everest Base Camp）、日本富士山（Mount Fuji）等热门目的地，不可降解垃圾的堆积成为突出问题。与此同时，栖息地破坏及入侵物种引入引发的生物多样性流失，进一步威胁这些区域的生态平衡。¹¹

山地的过度旅游问题同样冲击着当地社区的文化结构。游客涌入可能使基础设施超载，并干扰传统生活方式，削弱本土文化的原真性。在不丹、尼泊尔等原住民传统与习俗根植于日常生活的地区，旅游业的快速扩张可能导致文化遗产与身份认同的消解。当地节庆与圣地常因迎合游客需求而被商业化，削弱了其文化内涵。

对过度旅游负面影响的认知，推动了山地目的地保护意识的提升。早期由阿尔卑斯俱乐部（Alpine Club）、塞拉俱乐部（Sierra Club）等组织发起的保护行动，为可持续旅游实践奠定了基础。在亚太地区，类似举措逐步开展，如不丹通过严格旅游政策降低环境影响。其“高价值、低影响”（High Value, Low Impact）策略通过限制游客数量、强调品质导向，确保旅游业惠及环境与社区。

20 世纪末，全球旅游业因过度旅游问题转向可持续发展模式。亚太地区目的地正逐步采纳生态友好型与再生型旅游实践以减轻其影响，典型案例包括新西兰的生态旅游优先战略，以及印度喜马拉雅地区的社区主导型旅游（CBT）。此类举措聚焦减少资源消耗、保护自然与文化遗产，并保障社区的经济效益。

2.1.2.4 文化与社区

亚太山地旅游为文化遗产与社区参与提供了独特平台，在创造经济效益的同时，也为展示和保

存地方传统创造了机遇。然而，此类旅游发展需在开发与可持续性之间寻求平衡，对社区治理能力提出了更高要求。本节重点探讨亚太地区山地旅游涉及的文化与社区议题，分析其利弊得失。在亚太地区，社区旅游模式促进了游客与当地居民的深度互动。通过参与传统烹饪技艺学习、手工艺品制作及农耕实践等活动，游客得以真切体验原生态山地文化。这种模式在为社区创造可持续收入来源的同时，有效传承了传统技艺与知识体系。例如，尼泊尔山区的家庭寄宿项目使游客深度融入当地生活，直接提升接待家庭的经济收入。印度尼西亚山区的生态村将旅游与可持续农业及传统手工艺结合，构建起游客与居民的共生关系。然而，社区旅游的成功运作需依托审慎规划，以避免传统过度商业化而导致文化原真性流失。

世界文化和遗产旅游协会（WTACH）作为致力于文化遗产保护与推广的全球性组织，倡导实施负责任的可持续旅游实践。该组织通过促进政府、企业与文化行业机构间的协作，确保旅游业在惠及社区的同时维护文化遗产的完整性。¹² 以不丹为例，该国将传统节庆、手工艺及饮食文化作为旅游核心要素进行推广；日本山区则通过传统农耕、宗教仪轨及历史建筑保护维系文化独特性。此类举措不仅丰富了山地旅游的文化内涵，更有效推动了地方传统的代际传承。

亚太山地丰富的民间艺术传统折射出文化多样性。聚焦民间艺术的旅游模式使游客得以接触工艺传承人，深入了解传统技艺并购买地道手工艺品，既增加居民收入又提振地方经济。此类旅游还促进跨文化理解与互鉴。例如，印度喜马拉雅地区通过文化旅游项目，使传统织造与绘画技艺获得国际认可；不丹手工艺人在面向国际游客的推广计划中获益，确保传统艺术形式存续。然而，需要警惕的是，文化产品需求激增可能引发批量生产，从而

对传统工艺质量与原创性造成负面影响。

在某些情况下，山地旅游对亚太地区传统产业、表演艺术及饮食文化的振兴发挥了关键作用。例如，不丹通过实施文化旅游战略有效激活了本土节庆活动，在吸引国内外游客的同时成功保护了非物质文化遗产。尼泊尔对山地音乐舞蹈的推广则为当地艺术家搭建了展示平台，既创造了经济机会，又增强了对自身文化认同的自豪感。然而，此类效益也可能伴随文化商品化的风险，即为迎合游客偏好而对传统文化进行改造。长期来看，这种行为可能损害文化遗产的真实性及其内在价值。

2.1.2.5 快速数字化发展

数字技术正在改变旅游目的地数据采集、市场触达、产品服务供给及旅行便利化的方式。在线旅行社、移动应用程序、社交媒体和数字支付系统已广泛普及，其全球覆盖能力为旅游目的地和企业创造了巨大商机。提供替代住宿或交通服务的数字平台帮助小型经营者接入旅游经济。中国在这一领域位居前列，在线销售占全球旅游交易总量的 63%，年均增长率达 8%。预计到 2030 年，全球在线旅游市场规模将达每年近 1 万亿美元。¹³ 除商业效益外，数字工具还可助力目的地管理机构优化游客流量调控和环境监测，并提升旅游税费征收效率。

亚太地区山地旅游正经历由人工智能（AI）、大数据分析和移动应用等先进技术驱动的快速数字化转型。这些数字工具通过提升游客体验、优化目的地管理及应对过度旅游等挑战，重塑行业格局。然而，数字化应用进程的不均衡发展，尤其是偏远山区社区的技术滞后，严重制约了创新潜力的释放。

数字工具正成为亚太山地旅游管理的核心要素。例如，移动应用程序可实时提供天气、步道状况及本地景点信息，帮助游客高效规划行程；大数

¹⁰ National Geographic. 2023. What's the Problem with Overtourism.

¹¹ International Mountain Tourism Alliance (2024). Mountain tourism destinations responding to climate change.

¹² www.wtach.org

¹³ SkyQuest. 2023. Online Travel Booking Services Market Insights.

据分析则通过解析游客行为与偏好，助力管理者优化资源配置并提升服务质量。

比如，新西兰利用数字平台推广山区生态旅游，引导游客践行可持续行为；日本则通过数据驱动方案监测富士山游客流量，优化人群管理与基础设施规划。此类技术不仅提升了游客满意度，也有助于缓解旅游活动对环境与社会的负面影响。

人工智能解决方案正越来越多地被用于应对山地旅游中的复杂挑战。智能旅游技术（如 AI 聊天机器人、自动化预订系统）提升了旅游服务的便捷性与可及性，虚拟助手可为游客提供个性化活动、住宿及餐饮建议，优化整体体验。韩国已在热门山地景区运用智能技术进行管理，通过 AI 算法预测客流量并动态调配资源；而基于 AI 的图像识别工具还可监测森林砍伐、积雪变化等环境指标，为可持续管理提供关键支持。

2.1.2.6 弥合城乡数字鸿沟

尽管数字技术潜力显著，亚太山地旅游的数字

化进程仍受城乡数字鸿沟制约。许多山区社区缺乏应用先进技术所需的基础设施、网络覆盖与数字技能。高速互联网接入不足以及本地利益相关方培训的缺失，阻碍了包容性数字化转型。在尼泊尔、不丹等依赖旅游业维持生计的山区，这一鸿沟削弱了其参与数字化行业竞争的能力。要弥合这些差距，需针对性投资数字基础设施、实施能力建设项目，并与技术供应商建立伙伴关系，确保数字工具的公平获取。

2.1.2.7 旅行者类型与旅游需求转变

亚太地区以多元山地景观著称，吸引了不同动机与偏好的游客群体。从探险爱好者到文化探索者，该地区的山地旅游可满足多样化的旅行方式与兴趣需求。近年来，旅游需求趋势的演变深刻影响着山地游客类型，推动旅游产品重塑以契合新时期。本节将探讨亚太地区山地旅游的主要游客类型及其对应需求。¹⁴



图 11 - 主要山地旅游体验和活动

山地游客的类型

观光客

观光客是山地旅游群体的重要组成部分，其旅游动机源于区域壮丽景观的吸引力。这类游客的活动主要集中于观赏与拍摄山地景观，如喜马拉雅山脉、日本富士山或新西兰南阿尔卑斯山脉等地貌单元。他们更倾向于选择交通可达性强的目的地，偏好短途游览，往往依赖导游服务和缆车等交通方式。



图 12 - 观光客（图源：pexels.com）

家庭和休闲游客

这类游客会优先选择那些能让各年龄段都轻松参与、包容度高的度假体验，青睐那些设有家庭友好型景点的目的地，像风景宜人的公园、缆车游乐项目，或是较为轻松的漫步步道。例如，马来西亚的金马伦高原因其悠闲的山地度假特色，深受家庭游客的喜爱。



图 13 - 家庭和休闲游客（图源：pexels.com）

山地运动爱好者

这类游客群体包括专业户外运动者及业余爱好者，其核心需求是参与登山、攀岩、滑雪、单板滑雪及山地自行车等刺激性活动。尼泊尔安纳普尔纳环线、日本北海道滑雪场等专业户外运动基地，为此类游客提供了定制化服务。



图 14 - 山地越野跑（图源：pexels.com）

14 Amadeus (2023). Amadeus Tribes 2033 Report.



图 15 - 自然研学旅游者 (图源: pexels.com)

自然旅游者

这类游客群体通常由学者、学生或生态旅游者组成，致力于探索和认知自然环境，常开展野外考察、生态研究及野生动物观测等活动。不丹吉格梅·多吉国家公园、印度尼西亚山地森林等保护区是该客群的主要目的地。在亚太地区，这一群体还包括追寻“环太平洋火山带”等地质奇观的游客。

山地文化体验者

这类游客以深度体验在地社区与传统为核心需求，其行程重点包括节庆活动、手工艺实践及原住民文化体验。不丹、尼泊尔传统村落等文化原真性突出的目的地对此类游客具有吸引力。



图 16 - 山地文化探索者 (图源: pexels.com)



图 17 - 山地森林瑜伽体验 (图源: ibaotu.com)

山地健康旅行者

这类游客追求在静谧山地环境中实现身心疗愈，典型活动包括瑜伽静修、冥想训练及整体疗法。印度喜马拉雅瑜伽中心、巴厘岛山地疗愈所等目的地可满足其特殊需求。



图 18 - 山地民宿游客 (图源: pexels.com)

本真体验探索者

这类游客注重旅游体验的本真性，倾向于选择民宿、家庭旅馆等在地住宿形式。他们热衷于参与传统农耕、手工作坊等深度体验活动，通常更青睐小众山地旅游区。

生态保护倡导者

这类游客受生态保护和可持续理念驱动，积极追寻推行环保实践的目的地，常参与志愿活动或支持在地保护项目。例如，参与尼泊尔重新造林计划、马来西亚山地保护区野生动物保护等环保实践。



图 19 - 生态保护行动 (图源: IMTA 提供)

案例研究

瓦努阿图亚苏尔火山——高可达性“火山旅游”实践

亚苏尔火山坐落于瓦努阿图的塔纳岛，是全球最易于抵达的活火山之一。该火山以持续的斯特龙博利式喷发而闻名，现已成为一处主要的旅游胜地，每年都吸引着成千上万来自国内外的游客。其壮观的岩浆喷发景象，为游客带来独一无二的难忘体验，也因此成为瓦努阿图旅游业的支柱。

亚苏尔山旅游的主要特征

- 与众多其他活火山相比，亚苏尔山交通便利。游客能够乘车行至靠近山顶处，只需再徒步一小段距离，就能抵达火山边缘；
- 从瓦努阿图首都维拉港出发，搭乘国内航班，就能轻松抵达塔纳岛机场；
- 这座火山对于瓦努阿图当地民众而言，具有神圣的意义，并且深深融入他们的精神世界与文化习俗之中；
- 游客有机会参与火山附近当地社区举办的文化体验活动，比如观赏传统舞蹈、观摩仪式等。

亚苏尔山旅游效益

- 亚苏尔火山旅游是塔纳岛重要经济引擎，当地社区通过提供导游服务、交通运输和酒店接待获得就业机会；
- 随着游客数量的增加，手工艺品商贩和本地餐馆等小微企业蓬勃发展；
- 旅游业促进传统文化保护与传承，许多游客不仅为火山而来，更希望体验岛上独特的文化传统；
- 游客得以深入了解塔纳岛活跃的地质环境，加深对地球地质活动的认知与理解。

挑战

- 火山周边游客流量激增和车辆使用引发环境退化和水土流失担忧；
- 协调旅游业发展与生态保护之间的关系是长期面临的挑战；
- 亚苏尔火山喷发虽具可预测性，但突发性活跃仍存在旅游安全隐患；



图 20 - 亚苏尔火山（图源：IMTA 提供）

- 游客数量增长对本地资源造成压力并影响传统生活方式，实施游客容量管控是防范过度旅游的关键举措。

可持续旅游业倡议

- 社区直接参与旅游管理，确保经济收益本地化；
- 本地向导通过知识讲解和文化叙事提升旅游体验价值；
- 瓦努阿图政府实施准入管控和活动监测等安全环保规范；
- 推行垃圾分类管理和降低旅游碳足迹等生态友好型旅游措施。

成果和未来展望

亚苏尔山的旅游业夯实了塔纳岛作为太平洋地区必访旅游目的地的地位。这座火山持续吸引着热爱冒险的游客、摄影爱好者以及对自然奇观满怀兴趣的人群。然而，为了维持这一良好发展态势，亟需依靠政府、当地社区以及旅游业界协同合作，共同应对诸多挑战。

旅游需求的变化

亚太山地的旅游需求正顺应全球趋势以及新冠疫情后的旅游新形势而发生改变。游客愈发追求可持续且富有意义的体验，高度重视文化的本真性、环境责任感以及个人的幸福感。当下，数字平台在影响游客旅游选择方面扮演着关键角色，不仅帮助游客发掘那些尚未广泛开发的旅游目的地，也使得他们能够灵活定制自身行程。此外，生态旅游和再生旅游日益受到青睐，旅游重心已从大规模接待游客转向以质量为导向的可持续模式。不丹等旅游目的地正体现出这一转变趋势，在限制游客数量的同时，加强文化与环境保护工作。

2.1.2.8 危机沟通与目的地韧性

亚太地区因地震、台风、海啸等自然灾害频发而备受关注，因此将危机沟通与复原能力融入旅游

业极为关键。有效的危机沟通是旅游目的地韧性发展的基石，有助于在灾害发生时高效传播信息、维护公众信任并加速灾后恢复。联合国世界旅游组织（UN Tourism）《旅游业危机沟通工具箱》强调，通过提升应急准备、确保信息时效性及利益相关方协同，可有效减轻危机带来的负面影响。依托此类策略，亚太依赖旅游业的经济体可增强自身复原能力，确保灾后快速复苏与持续增长。¹⁵

随着外部环境不确定性的加剧，开发山地旅游专属危机管理工具箱将显著提升行业韧性。山地旅游面临独特挑战，包括极端天气、雪崩、山体滑坡/地震等自然灾害，以及气候变化对生态系统与旅游基础设施的冲击。相较于城市旅游，山地旅游常涉及偏远区位，应急响应能力薄弱及对自然资源的深度依赖，凸显前瞻性危机规划的必要性。

¹⁵ UN Tourism. 2012. Toolbox for Crisis Communications in Tourism.

专属工具箱可提供适配山地地理、环境与设施约束的风险评估框架、预警系统及危机沟通策略。工具箱整合历史危机应对经验，促进跨境协作，并推动技术应用（如 AI 气象预测、卫星监测、实时游客安全警报数字平台）。通过为社区、旅游从业者及政策制定者提供专业指南，此类工具将助力减少运营中断、优化灾后恢复工作，并增强脆弱但却具重大经济意义的山地旅游目的地地的长期可持续发展能力。

2.1.2.9 旅游促进和平与人文交流

中国通过强调文化与旅游的融合，印证了旅游业可促进人际、文化与国家间和谐关系。以“一带一路”倡议为代表的和平人文交流项目，凸显旅游业作为全球和平与互信平台的潜力。“一带一路”倡议以经济与基建合作为核心，深化了中国与世界的文化交流、教育合作及旅游伙伴关系。通过旅行、贸易与共享文化体验，中国有效推动了各国之间的连接。这一实践契合了旅游业应超越利润与休闲、成为跨文化互动催化剂的核心理念——即搭建跨越族群、信仰与文化的桥梁。¹⁶

旅游促进和平国际联合会（IIPT）作为全球非营利组织，致力于推动旅游业成为和平与可持续发展的力量。该组织自 1986 年成立以来，倡导促进国际理解、文化交流、环境保护与减贫的负责任旅行实践，主导了“全球和平公园计划”“和平旅行者信条”等倡议，并与联合国机构及全球旅游业界建立伙伴关系。通过强调旅游业在弥合冲突创伤、消除文化隔阂及推进可持续发展目标（SDGs）中的作用，IIPT 持续弘扬“每位旅行者皆是和平使者”的理念。

义工旅行（Voluntourism）将旅行与公益服务结合，在山地旅游可持续发展与生态保护中发挥重要作用。亚太地区的典型案例之一是尼泊尔的“喜马拉雅大径保护计划”，旅行者在徒步壮

丽景观的同时，可参与植树造林、废弃物管理及社区发展项目（如学校建设、电力供应）。通过直接参与生态保护与社区建设，义工旅行者在维护脆弱生态系统、保护文化遗产并支持可持续生计方面发挥了积极作用。此类项目表明，义工旅行能将旅行转化为目标驱动型体验，深化游客与目的地之间的联结。

2.1.3 到 2030 年的未来预测

全球山地旅游业有望实现长期显著增长，预计 2024 至 2026 年间，游客量与收入年均增长率将分别达到 6.5% 和 10%。至 2026 年，行业规模有望达到 14.74 亿人次，创收高达 1.82 万亿美元。随着全球逐步走出新冠疫情阴霾，亚太、北美和欧洲等地区引领经济恢复，为旅游业注入新的增长动能。预计到 2025 年底，全球旅游业国际游客量将超过疫情前水平。值得注意的是，新兴经济体的山地旅游增速将显著高于发达经济体，当前至 2030 年间年均增长率预计分别为 4.4% 与 2.2%。

到 2030 年，不同山地旅游目的地与活动类型将呈现若干关键趋势。传统市场，如西欧与北美滑雪产业，将面临人口老龄化、收入增长停滞等结构性挑战，制约新发展项目的推进。而东欧、中亚及太平洋地区的新兴市场将凭借基础设施的改善而展现出增长潜力，但仍存在不确定性。在澳大利亚，即便大幅减排，预计到 2030 年，滑雪季将缩短三分之一。进入 21 世纪 30 年代，滑雪季可能会减少 16–18 天，届时本洛蒙德山（Ben Lomond）与波波山（Mount Baw Baw）等滑雪场将受显著影响。为应对滑雪季缩短带来的挑战，山地度假区正拓展徒步、山地自行车及文化体验等全年性旅游产品，以维持客流量与经济稳定。

未来山地康养旅游的发展将聚焦于生态友好型倡议，深度融合高科技与个性化的健康体验，并重点推行能实现身心联结的整体疗法。文化沉浸式体验以及传统疗法在吸引健康旅游客群方面，也将扮演至关重要的角色。与此同时，再生旅游愈发受到关注，其目标不仅仅是维持山地的自然与文化环境，更要实现对这些环境的改善。这种模式强调社区的深度参与、倡导负责任的户外活动，以及推动生态友好型基础设施的建设。¹⁷

技术进步将持续塑造山地旅游业的未来图景，包括用于打造沉浸式体验的虚拟现实（VR）与增强现实（AR）技术、应用于度假村的智能基础设施，以及助力提升游客管理效率与推动可持续发展的数据驱动型解决方案。旅游预订与虚拟导览的数字化平台应用加速发展，2022 年山地与冰雪旅游在线预订占比已达到 25%。随着游客日益追求便

捷规划工具，并重视强调低环境影响旅行体验与绿色基础设施建设的可持续发展愿景，该趋势将持续增强，预计在 2030 年前实现运营零净足迹。然而，尽管山地旅游重要性日益凸显，其规模与影响数据仍显匮乏，亟需完善数据采集与分析体系以支撑可持续决策。¹⁸

2.2 亚太山地旅游目的地

亚太地区拥有广袤且多样的山地景观，从雄踞世界之巅的喜马拉雅山脉，到分布于印度尼西亚、日本等国家、由环太平洋火山带塑造的活跃火山群，构成了丰富而壮观的自然景观。这种多样的地理环境造就了丰富的气候类型，既有喜马拉雅山寒冷多雪的高山环境，也有东帝汶和瓦努阿图等地温暖潮湿的热带山地生态系统。正是这种资源禀赋为



图 21 - 日本富士山（图源：pexels.com）



图 22 - 珠穆朗玛峰（图源：pexels.com）



图 23 - 唐古拉山脉（图源：IMTA 提供）



图 24 - 印度尼西亚布罗莫火山（图源：IMTA 提供）

¹⁶ www.peacetourism.org/

¹⁷ International Mountain Tourism Alliance (2023). Report on Development Trend of World Mountain Tourism.

¹⁸ Future Market Insights (2022). Snow and Mountain Tourism Sector Overview and Outlook.

旅游目的地的开发奠定了基础，使得亚太地区形成了悠久的山地旅游传统。

2.2.1 亚太山地旅游发展史

长久以来，山脉在东西方传统中承载着截然不同的文化内涵。西方视山岳为征服对象，体现了人类主导自然的价值观，这种理念集中体现于以登顶为终极目标的登山传统。相比之下，亚洲多数文化将山岳视为神圣之地，承载着精神信仰、自然和谐等深层内涵。在中国、日本及喜马拉雅地区，山岳普遍被视作神明居所、朝圣圣地与智慧源泉，而非待征服的障碍。日本登山家松冈健一郎对此有精辟论述：“在西方，人们因山在那儿，所以去攀登；在东方，我们与山共处，只因山在那儿。”这种观念上的本质区别，塑造了亚太地区独特的山地旅游理念，即强调保护、灵性与和谐共存，而非统治与征服。

亚太山地旅游发展史是地理、文化与社会经济因素共同作用的叙事。千百年来，巍峨山岳的精神感召力与探险魅力持续吸引着各地旅行者，其源头可追溯至古代宗教实践。喜马拉雅山脉被尊为“雪域圣境”，在印度教、佛教与耆那教中具有核心地位；日本富士山作为神道教与佛教圣地，早在7世纪便吸引朝圣者登山修行；冈仁波齐峰因其“须弥山人间化身”的神圣属性，成为跨喜马拉雅地区持续千年的朝圣中心。

18至19世纪，欧洲殖民势力在亚洲的扩张催生了山地旅游新形态。探险家、博物学者与测绘人员深入亚洲山地，开展地理勘测与生物考察。英国殖民当局在喜马拉雅地区建立西姆拉（Shimla）、大吉岭（Darjeeling）和努沃勒埃利耶（Nuwara Eliya）等山地驻点，兼具避暑休憩场所与科学研究基地的双重功能。这些驻点逐渐演变为殖民精英的休闲场所，推动山地景观探索与康乐活动的结合。道路、铁路等基础设施建设为旅游发展提供便利、奠定基础。在东南亚，殖民统治同样激发了人们对山地的兴趣。比如，马来西亚的金马伦高原

成为备受欢迎的度假胜地，为人们提供了逃离热带低地酷热的去处，而英国人开辟的茶园，更为这片高地景色增添了农业魅力。

20世纪，登山活动开始在大众中兴起，尤其是在喜马拉雅山区。征服珠穆朗玛峰等高峰的探险活动引起了全球瞩目。1953年，埃德蒙·希拉里爵士（Sir Edmund Hillary）与丹增·诺盖（Tenzing Norgay）成功登顶珠峰，这一里程碑事件激发了国际社会对喜马拉雅山登山活动的浓厚兴趣，登山俱乐部与相关组织如雨后春笋般涌现。山地旅游不仅吸引了经验丰富的登山者，也吸引了业余冒险者。尼泊尔凭借其壮观的景观以及多座海拔超8000米的山峰，成为徒步与攀登的热门中心。安纳普尔纳大环线（Annapurna Circuit）和珠峰大本营（EBC）等徒步路线的开辟，进一步提升了尼泊尔的吸引力。同一时期，日本的山地旅游也迅猛发展，日本阿尔卑斯山与富士山吸引了大量国内外游客。20世纪初开始出现的滑雪等活动，让山地成为全年皆宜的旅游目的地。



图 25 - 1953 年人类首次登顶珠峰（图源：Pinterest）

二战结束后，众多亚太国家的腾飞经济推动了大众旅游发展。基础设施的不断完善、民众收入水平提高以及闲暇时间增多，让更多人有机会去探索山地。以日本为例，新干线（俗称子弹头列车）的建设提升了偏远地区的可达性；而在中国、印度等国家，新建的机场和高速公路拓展了大众群体前



图 26 - 不丹山地社区（图源：ibaotu.com）

往山地旅游目的地的通道。到了20世纪末，随着生态旅游与可持续旅游理念的兴起，山地旅游获得了进一步发展契机。各国逐渐意识到，在旅游业发展进程中，必须在开发利用与保护之间寻求平衡，特别是在不丹高地、巴布亚新几内亚热带山地森林这类生态敏感区域。不丹推行的“高价值、低影响”旅游政策便是这一理念的典型实例，该国通过限制游客数量，实现对文化与自然遗产的有效保护。

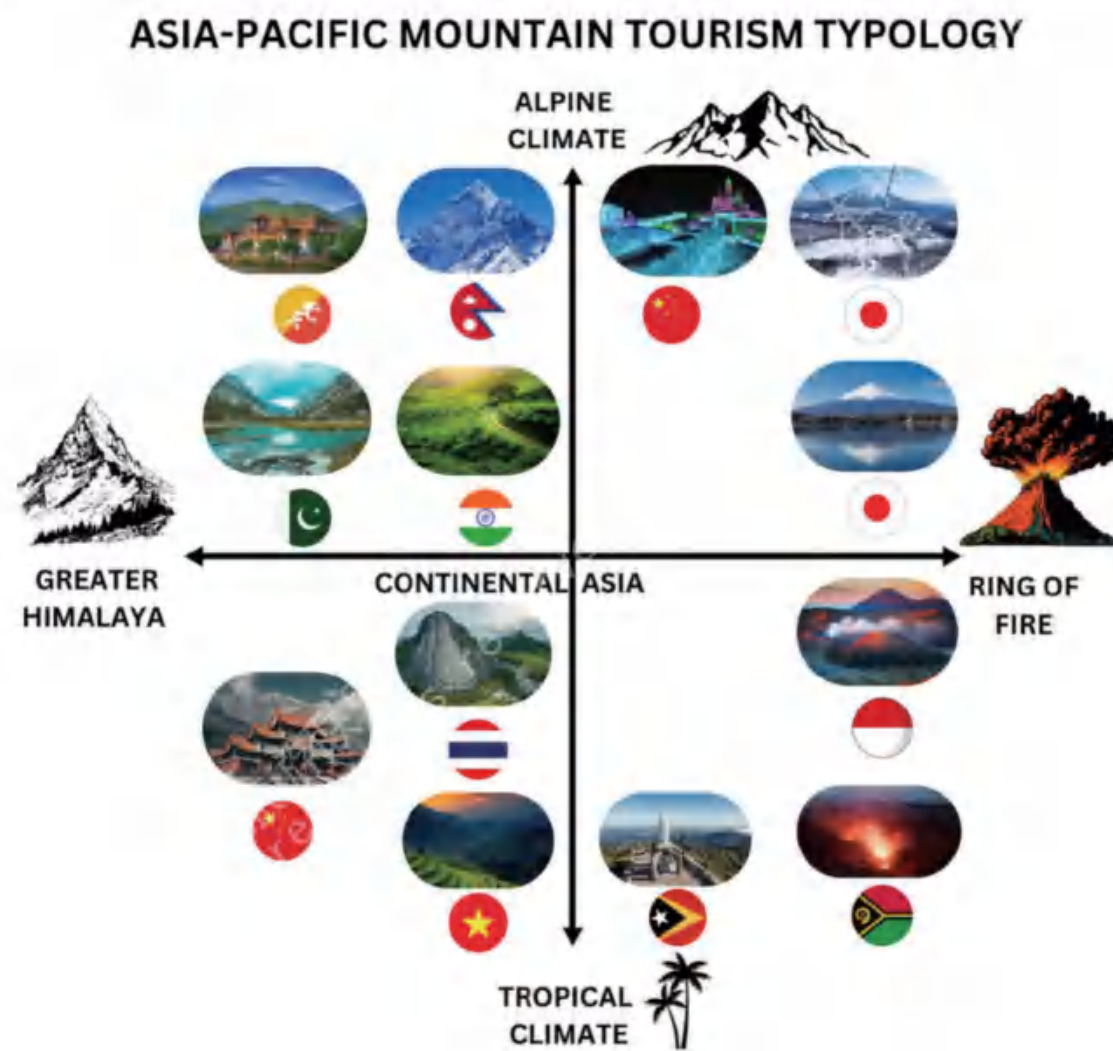


图 27 - 亚太地区山地旅游的类型

2.2.2 了解亚太山地旅游供需

2.2.2.1 户外“肾上腺素”运动

亚太地区拥有各种各样的山地景观，为滑雪和攀岩运动提供了丰富的资源。日本、韩国、中国和新西兰等国家的滑雪产业尤为突出，拥有完善的度假村和基础设施。例如，日本的世界著名滑雪胜地 Niseko，以其优质的粉末雪而闻名，而新西兰的南阿尔卑斯山脉提供广阔的高山地形资源。在攀岩资源方面，泰国的甲米府以其世界级的石灰岩悬崖闻名，中国的阳朔地区则以壮观的喀斯特地貌吸引着全球攀岩爱好者。这些区域凭借日益完善的基础设施和攀岩旅游服务体系，正吸引着越来越多的国内外攀登者。

从供给侧来看，印度和东南亚等新兴市场对旅游基础设施的投资力度持续加大，有效推动了产业发展。政府部门和私营运营商通过扩大设施规模、改善交通条件并在全球范围内推广旅游目的地，不断提升服务能力。需求侧方面，近几十年来亚太地区的滑雪和攀岩需求显著增长，这主要得益于中产阶级收入水平的提升、城市化进程的加速以及探险旅游理念的普及。在日本和中国，滑雪运动在本地游客中的受欢迎程度持续攀升，同时吸引了大量来自韩国、澳大利亚等邻近国家的游客。2022 年北京冬奥会的成功举办更是提升了滑雪产业的关注度，并吸引了更多投资。攀岩



图 28 - 中国新疆阿尔泰山地区滑雪 (图源: douyin.com)

作为不断增长的细分市场，吸引着追求探险与独特地貌体验的爱好者。泰国、马来西亚等地的攀岩目的地通过提供向导服务与举办专业赛事，兼顾了初级爱好者与资深攀岩者的需求。此外，体验式旅游与户外活动的兴起趋势也助推了市场需求的增长。

这两大业态面临的主要挑战包括气候变化对滑雪积雪稳定性的影响，以及攀岩区域的环境退化问题。此外，热门旅游地的过度拥挤和由此产生的生态影响也引发关注。未来发展机遇在于通过产品多元化实现全年候旅游开发，并践行可持续发展理念。例如，滑雪度假区正积极推广山地自行车、徒步旅行等反季节项目；攀岩目的地则可通过社区参与型旅游模式，将生态保护与地方经济发展有机结合。总体而言，亚太地区凭借独特的地形地貌和日益增长的户外探险需求，展现出强劲的滑雪与攀岩供给能力及市场增长潜力。但要实现长期可持续发展，必须有效应对环境挑战，并确保旅游开发过程中的社区公平参与和合理的利益分配。



图 29 - 徒手攀岩运动 (图源: pexels.com)

2.2.2.2 软冒险

亚太地区广袤多样的山地景观推动了徒步旅行、观鸟和文化旅游的持续发展。这些活动不仅契合市场对自然体验型旅游日益增长的需求，也为可持续管理带来挑战与机遇。徒步旅行作为亚太山地旅游的重要形式，因其满足游客的体能锻炼需求、



图 30 - 尼泊尔安纳普尔纳峰环线徒步 (图源: NATTA)

自然连接诉求和多样化景观探索愿望而广受欢迎。诸如尼泊尔安纳普尔纳环线和日本熊野古道等标志性徒步路线，吸引了大量国内外游客。供应侧通过开发维护良好的步道系统、完善向导与自助游基础设施、建设徒步者专属住宿设施等措施予以响应。但设施分布不均导致旅游活动过度集中于特定热点区域，引发拥挤和环境退化问题。政府与地方管理机构正通过徒步路线多元化和游客体验提升计划应对这些挑战。

观鸟活动在印尼、马来西亚和巴布亚新几内亚等生物多样性丰富的地区日益受到自然爱好者青睐。该地区山地特有的鸟类物种（包括多种特有物种）构成了核心吸引力。具有高消费意愿特征的观鸟者聘请专业导览、租赁观鸟器材以及购买相关服



图 31 - 山地观鸟活动 (图源: pexels.com)

务，为地方经济做出重要贡献。在供应端，保护组织与旅游运营商合作，开发了融合生态保护教育的观鸟旅游产品。然而，主要挑战在于如何平衡游客数量与脆弱栖息地保护需求，并确保当地社区真正受益。

山地文化旅游与地方社区丰富的传统习俗、文化遗产和精神信仰深度交织。不丹将文化保护与旅游业有机融合，印度部落地区和越南山地部落亦是典型范例。游客被特色节庆、传统手工艺和历史叙事所吸引，获得独特的文化沉浸体验。为满足需求，业界着力开发原真性文化体验产品，包括民宿、手工艺作坊和以本土知识为核心的导览服务。但商业化运作带来的文化商品化风险仍然存在。以社区为基础的旅游模式等可持续实践正被广泛采用，旨在保护文化的完整性，并确保地方居民能够真正受益。

后疫情时代，非拥挤的户外开放型旅游目的地偏好趋势助推了亚太山地徒步、观鸟和文化旅游的发展。为实现可持续发展目标，利益相关方聚焦于全年候旅游产品开发、数字基础设施建设和社区合作机制建立。应对过度旅游、环境退化和文化侵蚀的措施包括制定清晰的游客管理政策、加强地方利益相关者能力建设、探索创新生态保护融资机制等。这些策略旨在实现供需关系的动态平衡，确保游客与地方社区的长期共赢。



2.2.2.3 康养养生、精神疗愈

近几十年来，在全球游客偏好转变、旅游基础设施不断完善，以及本地区独特文化与自然资源的共同推动下，亚太地区以健康养生及精神疗愈体验为核心的旅游业取得了显著增长。此类旅游业态的供给深受该地区多元文化和自然禀赋的影响。印度、尼泊尔、不丹等国依托其精神文化遗产，提供以瑜伽、冥想、太极及整体疗法为核心的静修项目，吸引游客前往喜马拉雅山脉等神圣宁静的山地环境寻求精神焕新。温泉疗愈、森林康养及高端养生度假村等业态亦日益普及，尤以日本、中国和韩国最为突出。



图 32 - 山地环境中习练陈氏太极拳
(图源: IMTA 提供)



图 33 - 山地瑜伽冥想 (图源: pexels.com)

山地因其洁净空气、自然景观与宜人气候，成为发展康养旅游的理想之地。例如，日本温泉小镇或印尼火山温泉区的矿物质温泉兼具休

闲与理疗功能。传统疗愈方式（如印度的阿育吠陀或中国的中医药）的融入，提升了文化真实性与吸引力。健康养生旅游需求的增长得益于消费者健康意识增强、减压需求上升以及对自然可持续目的地的青睐。后疫情时代，低密度户外旅游目的地需求显著增加，进一步凸显山地与养生旅游的吸引力。游客更倾向于个性化与身心重塑体验，例如基于本土传统的正念静修或特色水疗服务。

随着游客期望与亚太地区深厚的宗教文化传统建立深度联系，精神旅游（Spiritual tourism）同样展现出强劲的需求增长态势。诸如冈仁波齐峰、巴厘岛灵修中心及不丹寺院等目的地吸引着国内外游客，这与全球范围内旅行者追求意义感与自我探索的趋势高度契合。然而，尽管该地区健康、养生及精神旅游的需求旺盛，其发展仍面临多重挑战。在脆弱的山地生态系统中，如何确保可持续性、维护文化实践的真实性以及管控环境影响，仍是亟待解决的核心问题。为此，政府与相关机构正逐步推行可持续旅游战略，包括采用社区参与型旅游模式，使当地居民能够参与决策并共享经济利益。

2.2.2.4 社区美食旅游

在消费者日益增长的真实文化体验需求以及亚太地区多样化烹饪传统的双重推动下，该地区对饮食、烹饪和美食旅游的关注度持续提升。美食旅游与山地旅游目的地的结合为供需双方创造了独特机遇与挑战。亚太地区美食旅游的供给端植根于该地区丰富的农业资源和烹饪文化遗产，尤其是山地地区，其独特的本土食物系统、传统农耕实践和本地食材资源为旅游开发提供了坚实基础。不丹、尼泊尔和菲律宾等国通过挖掘传统饮食文化，成功打造出独具特色的美食旅游体验。山地旅游目的地为农业旅游与美食旅游的融合发展提供了契机。游客可参与斯里兰卡高海拔茶园采茶、喜马拉雅森林采摘，或向当地社区学习区域特色菜肴制作等体验活动。这些活动不仅具有体验价值，更有助于促进

可持续发展并支持地方经济。

基础设施建设（包括从农场到餐桌的餐厅、烹饪学校和本地食品市场）在完善供应链方面发挥重要作用。日本、韩国等国家已开发出山地美食线路和节庆活动以展示区域风味特色。数字技术和营销领域的应用也使偏远山区供应商得以触达更广泛客群，有效弥合山地资源与国际市场需求之间的鸿沟。就需求端而言，随着旅游者对沉浸式真实体验的追求不断升级，亚太地区美食旅游需求呈现显著增长态势。全球可持续旅游理念的兴起进一步助推了这一趋势，游客日益青睐本地生产、有机环保的食品。新冠疫情期间，游客对低密度自然型目的地的偏好增强，为山地美食旅游创造了发展机遇。文化好奇心是驱动需求的关键因素，旅游者将探索区域美食视为理解地方文化遗产的重要途径。例如，以馍馍（momos）

和扁豆饭（dal bhat）为代表的尼泊尔喜马拉雅饮食已成为徒步旅行体验的重要组成部分。类似地，山地传统节庆中的特色美食展示也成为季节性旅游的亮点。

此外，美食与烹饪旅游对青年冒险旅游者、家庭游客和退休群体均具有吸引力。社交媒体和数字内容在需求激发方面发挥关键作用，山地景观中富有视觉吸引力的美食体验常引发全球关注。尽管美食旅游可带来经济和文化效益，但仍面临多重挑战：脆弱的高山生态系统易受过度旅游和废弃物管理问题影响，需通过精细化规划与监管实现平衡发展；同时还需加强社区能力建设，确保在满足游客期望的同时维系文化真实性。



▲ 图 34 - 乡村美食

▲ 图 35 - 山地农产品
(图源: PATA 提供)

案例研究

挖掘东帝汶拉梅劳山的旅游潜力

拉梅劳山作为东帝汶的最高峰，是一处具备深厚文化与宗教意义的旅游胜地，近年来吸引的游客数量逐年递增。尽管未经雕琢的自然景观以及极高的象征价值，使其成为山地旅游开发的理想之选，然而，在发展过程中，仍存在诸多重大挑战与机遇亟待应对与把握。

旅游发展潜力

拉梅劳山的魅力体现在它对天主教信众的重大精神意义，以及令人惊叹的自然美景上。当前，这里的游览项目包括徒步登顶、参观圣母玛利亚雕像，还有每年吸引成千上万本国游客前来的朝圣活动。2018年，登上此山的游客超过31000人，尽管它在国际上的知名度尚限，但在国内颇具盛名。毗邻的哈托·布利科村，以凉爽的气候、传统的茅草顶房屋以及迷人的山景闻名，有望成为开展社区旅游的重要门户。

关键挑战

一些限制因素阻碍了该景点作为可持续旅游目的地的发展。其中包括：

- 基础设施短板：道路通行条件不佳，废物处理体系不完善，标识系统设置不健全，游客配套设施（如卫生间、休憩庇护场所等）匮乏；
- 游客管理难题：在节日时段，游客过度聚集，引发安全隐患，致使环境遭受破坏，同时降低游客的游览体验；
- 利益相关者协同困境：地方社区、政府部门以及宗教组织之间管理分散，缺乏有效整合，对统一规划与发展形成阻碍；
- 经济与技能落差：当地企业难以获取提升住宿与服务水平所需的培训资源，国际市场推广力度有限，制约了对更广泛游客群体的吸引力。

战略机遇

- 参与式规划与管理：构建由地方、政府以及宗教团体代表共同组成的利益相关者委员会，以此保障决策的包容性，协同统筹旅游发展目标；
- 旅游产品多元化：拓展旅游活动范畴，涵盖文化旅游、山地自行车运动以及自然徒步等项目，借此吸引多元化的游客客群。积极推广本地手工艺品及农产品作为旅游纪念品，有效提升社区旅游收益；

- 基础设施投入：对道路、步道以及游客服务设施进行升级改造，长远规划建设游客中心与露营地，从而提升旅游安全性，全方位优化游客整体体验；
- 可持续发展举措：施行可控的游客准入机制、开展环保教育活动并完善废物管理体系，以此减轻旅游活动对环境的影响，推动负责任旅游的发展；
- 能力素养培育：针对当地导游、宾馆及餐饮从业者开展专业培训，提升旅游服务质量，改善游客体验，进而提升回访率。



图 36 - 徒步者成功登顶东帝汶最高峰拉梅劳山（图源：MRyan）

2.2.2.5 安全保障

亚太地区山地旅游目的地的游客安全保障是可持续旅游实践与危机管理战略的关键议题。该地区多样化的山地旅游目的地往往地处偏远，在游客安全保障方面面临独特挑战，同时也蕴含潜在机遇。山地环境本身具有生态脆弱性，风险包括雪崩、山体滑坡和极端天气条件等。例如，山地生态系统对气候变化的敏感性加剧了此类风险，不仅影响自然景观，还对旅游基础设施造成威胁。高海拔地区存在高原反应等额外健康风险，需通过游客教育及预防措施加以应对。偏远山区的旅游基础设施普遍存在承载力不足问题。道路、医疗设施及应急救援服务等基础条件在多数地区较为薄弱，亟需制定本土化策略以提升可达性与安全性。政府部门与相关

机构日益重视旅游服务数字化，并通过强化多层次治理提升应急准备能力。

将当地社区纳入旅游管理被视为提升安全性的核心策略。社区参与型旅游不仅产生经济效益，更能借助本土知识与实践进行风险管理和游客引导。对当地导游开展安全规程与急救技能培训是保障旅游体验安全的重要环节。采取可持续旅游实践有助于缓解过度旅游与环境退化引发的风险。例如，通过控制山地旅游目的地环境承载力、实施废物管理系统等措施，可促进安全型旅游发展。新冠肺炎疫情凸显了山地旅游中强化卫生安全规范的必要性。众多旅游目的地已采取包括推广低密度户外体验、确保住宿与活动场景的卫生安全标准等策略，进行相应的调整与改进。

案例研究

中国梵净山旅游承载力管理

梵净山位于中国贵州省，作为联合国教科文组织世界遗产，其独特的生态价值和宗教意义享誉全球。作为中国第 53 处世界遗产，该地区在实施严格游客管理制度的同时，已发展成为宗教旅游的重要目的地，成功实现了生态保护与旅游开发的平衡。

一、核心旅游特征

- 梵净山作为一处神圣的佛教圣地，拥有历经数百年岁月的寺庙建筑，不仅吸引着众多朝圣者，还备受自然爱好者的青睐；
- 为避免过度旅游，切实保护梵净山脆弱的生态系统，当地严格执行每日 1 万名游客的接待上限；
- 贵州省桥梁数量超过 30000 座，多座桥梁位列世界桥梁高度排名前列，这些桥梁极大地提升了交通可达性，有效缓解了交通拥堵状况，为游客前往梵净山提供了便利；
- 梵净山生物多样性丰富，拥有如贵州金丝猴等珍稀物种，这使其成为极具重要性的生态保护区。

二、游客量管控效益分析

- 日接待量管控有效维护自然环境，避免人类活动过度干扰步道及栖息地退化；
- 游客获得更宁静的沉浸式体验，避免拥挤环境，增强与自然及宗教场域精神的联结；
- 当地社区从有序旅游模式中获益，获得长期就业与经济稳定，而非消耗资源的短期大众旅游红利；
- 基础设施与服务保持高标准，规避其他高流量景区常见的设施损耗问题。

三、管理实践挑战

- 需求管理存在难度，旅游热度过高常导致预约时段紧张；
- 严格的游客限额虽具可持续必要性，但可能制约依赖高客流量的企业经济收益；
- 需持续监测并调整游客管理策略以保障长期可持续性。

四、可持续旅游创新举措

- 当地社区深度参与旅游治理，确保经济利益公平分配与生态平衡；
- 通过教育项目与导览服务推广负责任旅游，引导游客尊重环境与文化遗产；
- 实施分时预约准入、环保型交通及废弃物管理系统等制度，降低环境影响；
- 投资可持续住宿与交通设施，保障旅游增长，同时不损害生态完整性。

五、发展成效与展望

梵净山旅游业通过战略性游客限制，成功规避过度旅游问题，实现游客体验与社区利益的双重提升。游客数量管控维护了文化生态原真性，既保障游客高品质体验，又为居民创造可持续经济机会。未来需持续强化可持续旅游管理，确保梵净山作为宗教文化与自然旅游目的地世界级地位与保护水平。



图 37 - 中国贵州梵净山（图源：李贵云提供）

2.2.3 亚太地区山地旅游亮点

亚太地区凭借其多样化的地貌景观、丰富的文化遗产及持续增长的基础设施投资，正逐渐崛起为全球山地旅游的重要枢纽。疫情后的复苏进程进一步增强了该区域的吸引力，旅游者愈发青睐开阔空间与自然导向的体验。若干关键趋势正在塑造亚太地区山地旅游的发展前景。

2.2.3.1 探险旅游发展潜力持续增长

亚太地区山地旅游正经历动态转型，其驱动力来自人口结构变化、自然体验需求增长及经济贡献扩大。该领域涵盖徒步旅行、登山及冒险旅游活动，持续吸引多元化客群并推动区域经济发展。以尼泊尔为例，2019 年该国接待外国游客超 119 万人次，

其中大量游客参与徒步、登山等山地活动。而亚太地区整体的山地旅游同样呈现增长态势，2017 年国际游客量增长 6%，达 3.23 亿人次，山地目的地对此增长贡献显著。与全球趋势一致，2019 年山地旅游占国际游客量的 9%–16%，对应 1.95 亿至 3.75 亿人次。

亚洲各国保护区的山地旅游扩张态势尤为显著。中国、日本、韩国、印度尼西亚和越南等国家积极构建山地保护区网络，以满足自然导向型旅游的旺盛需求。中国保护区已建成支撑该领域发展的强健基础设施；日本则依托以山地为主的国家公园，通过战略化公园管理与自然旅游推广，提升访客吸引力。类似地，韩国和越南通过协调治理与可

持续旅游举措增强山地保护区吸引力，实现游客增长与生态保护的平衡。山地旅游对该地区的经济贡献同样日益显著。2023 年亚太地区冒险旅游市场（含山地活动）收入达 1,084 亿美元，预计至 2030 年将以 17.2% 的复合年增长率持续增长。此外，与山地资源高度相关的野生动物旅游市场

同样扩张迅速，预计将从 2023 年的 844 亿美元增至 2030 年的 1,523 亿美元。以登山等高风险活动为主的极限旅游板块，2024 至 2031 年间复合年增长率预计高达 17.9%，反映出山地极限运动关注度的显著提升。¹⁹

案例研究

巴基斯坦山地旅游——不断发展的探险旅游中心

巴基斯坦北部地区坐落着多座世界标志性山脉，包括喜马拉雅山脉、喀喇昆仑山脉和兴都库什山脉。该区域拥有全球 14 座 8000 米以上高峰中的五座，其中以世界第二高峰乔戈里峰 (K2)（海拔 8,611 米）最为险峻。近年来，巴基斯坦凭借壮丽的自然景观、丰富的文化遗产及独特的探险资源，在山地旅游推广方面取得显著进展。

巴基斯坦山地旅游核心特征

- 北部地区凭借原始山谷、巴尔托罗与比亚福等巨型冰川，以及南迦帕尔巴特峰和乔戈里峰等传奇山峰，成为徒步者、登山者及探险爱好者的首选目的地；
- 被誉为“世界第八大奇迹”的喀喇昆仑公路，为游客提供了穿越山脉的震撼路线，吸引着国内外旅行者；
- 2023 年外国游客数量较上年激增 115%，彰显疫情后旅游市场的强劲复苏；
- 2022 年仅开伯尔 - 普赫图赫瓦省便接待 880 万游客，其中纳兰、卡甘及加利耶特等景区年度访客量均达数百万级。

经济社会效益分析

- 旅游业增长促进了向导、背夫及民宿经营等就业岗位的增加，显著带动了地方经济发展；
- 旅游收入支持偏远地区基建、教育与医疗建设，有效提升了当地社区生活质量；
- 在国家层面，旅游业增加了外汇储备，推动基础设施投资，并提升了巴基斯坦作为全球顶级探险与文化旅行目的地的国际地位。

挑战与可持续旅游实践

- 游客量激增加剧了环境退化、废物管理压力及人类活动对脆弱生态系统的潜在威胁；
- 通过实施生态友好型徒步政策、废物管理体系及游客责任指南等可持续旅游措施，着力保护区域自然景观完整性；
- 政府与私营部门协作维护经济发展与生态保护之间的平衡，确保山地旅游的长期可持续性。

未来发展趋势

巴基斯坦山地旅游产业持续蓬勃发展，在为探险者提供独特体验的同时促进偏远地区经济增长。通过系统化推行可持续旅游实践，该国正着力保护自然景观与文化遗产的代际传承。随着基础设施投入的持续加大与责任旅游政策的完善，巴基斯坦北部地区有望发展成为全球山地旅游的核心枢纽。



图 38 - 巴基斯坦巴尔托戈冰川（图源：pexels.com）

2.2.3.2 可持续旅游

亚太地区正积极实践三种相互关联的可持续旅游形式——生态旅游、再生旅游与义工旅行，以此融入全球责任旅游的整体趋势。需明确这些概念既相互区别又彼此关联的内涵，及其如何为游客与目的地创造双向价值：

- 生态旅游聚焦于负责任的自然区域旅行，强调环境保护、教育功能及对当地社区的赋能；
- 再生旅游超越传统可持续性目标，不仅维护

自然与文化遗产，更通过主动修复与优化生态系统，为后代创造更高价值；

- 义工旅行将旅行与志愿服务结合，游客参与社区或环境保护项目，贡献时间与技能，在产生积极影响的同时建立深度人文联结。

以“国民幸福总值”衡量旅游成效的不丹，以及以保护型旅游模式闻名的新西兰等国家，正引领亚太地区可持续山地旅游的发展。该区域旅行者不仅追求最小化环境足迹的体验，更关注自

¹⁹ Adventure Travel Trade Association (ATTA)

身对生态系统修复与社区福祉的积极贡献。推广可再生能源应用、废弃物管理及社区主导型保护计划等举措，正逐渐成为区域山地旅游的重要组成部分。

义工旅行，即旅行与志愿行动结合的旅游形式，在推动山地旅游可持续发展与生态保护方面发挥关键作用。例如亚太地区典型案例尼泊尔“喜马拉雅大径保护计划”，该倡议允许旅行者在穿越壮丽景观的同时，直接参与区域内的再造林行动、废弃物管理项目及社区发展计划（学校建设与电力设施等）。通过深度参与社区互动与环境保护行动，义工旅行者支持脆弱生态系统保护、文化遗产传承及可持续生计做出



图 39 - 不丹壮观的安曼度假村之一（图源：PATA 提供）



图 40 - 尼泊尔都喜天丽喜马拉雅度假村（图源：PATA 提供）

积极贡献。此类项目印证了义工旅行如何将旅行转化为使命驱动型体验，实现游客与目的地之间更深层次的联结。

2.2.3.3 体验式休闲旅游

亚太地区高端山地旅游发展势头强劲，旅游目的地将自然景观与高端设施相结合。日本箱根地区、印度尼西亚山地度假区等地的生态友好型度假村，为追求可持续奢华体验的高净值客群提供专属服务。此类设施通过推出康养主题套餐及沉浸式体验项目，使游客在享受高品质住宿的同时，以负责任方式深度接触自然。典型范例包括不丹安曼酒店集团旗下物业、尼泊尔都喜天丽喜马拉雅度假村等标志性项目。

亚太地区多元文化底蕴为山地文化沉浸式体验创造了独特机遇。游客日益青睐能够接触原住民社区、参与地方节庆、学习传统工艺的旅游体验。例如，不丹的戒楚节庆和尼泊尔充满生机的山地村落，都为游客提供原真性的文化交流机会。越南、印度尼西亚等国推行的社区旅游项目，在促进可持续实践的同时，也使当地居民能够直接从旅游业中获益。

此外，亚太地区宁静的山地环境正成为康养旅游的理想目的地，近年来这一业态显著增长。印度喜马拉雅静修所和巴厘岛山间疗愈圣地等目的地，因瑜伽、冥想及整体疗法而备受推崇。结合自然景观与传统疗愈实践（如阿育吠陀和温泉理疗）的康养套餐需求日益旺盛。后疫情时代对身心健康的关注进一步加速了此类产品的普及。

亚太山地旅游业正通过技术手段提升游客体验。移动应用程序、电子商务平台及数据驱动解决方案，使游客能够无缝规划行程、获取实时信息并高效预订住宿。虚拟现实技术也被用于富士山、喜马拉雅山等目的地的展示，为潜在游客提供沉浸式预览。此外，可穿戴设备与 GPS 追踪器等安全技术的进步，保障了游客在复杂地形中的安全探索。

滑雪、单板滑雪等冬季运动在亚太地区日益普及，日本北海道、韩国平昌、印度古尔马尔格等目的地的表现尤为突出。尽管气候变化带来挑战，但滑雪场通过采用可再生能源和可持续造雪技术等环保措施，应对降雪不稳定的问题。这些创新既保



图 42 - 山地滑雪（图源：pexels.com）



图 43 - 山地露营（图源：pexels.com）

障了冬季旅游的可持续发展，又履行了环保责任。

露营与户外休闲活动在亚太地区蓬勃发展，澳大利亚和新西兰位居行业前沿。该地区多样化的山地景观为野奢露营、徒步旅行及自然探索提供了理想场所。灵活且经济实惠的露营选择吸引了国内外游客，推动该细分市场持续增长。典型案例包括老



图 41 - 老挝的红木山顶帐篷（图源：PATA 提供）



图 44 - 柬埔寨的卡多蒙帐篷营地（图源：PATA 提供）

Volcanoes in Indonesian
印度尼西亚火山

挝琅勃拉邦的瑰丽山顶帐篷营地，以及柬埔寨豆蔻山脉的豆蔻帐篷营地等。

亚太地区山地丰富的生物多样性，激发了人们对野生动物旅游的浓厚兴趣。诸如尼泊尔的安娜普尔纳保护区、印度的喜马拉雅山保护区等旅游目的地，为游客提供了在自然栖息地观察雪豹、小熊猫、喜马拉雅塔尔羊等珍稀物种的机会。秉持负责任理念的野生动物旅游项目，在注重生物保护的同时，也为游客创造兼具独特性与教育性的体验。

亚太山地旅游体现了可持续性、文化参与与冒险精神的有机融合。随着旅行者日益追求有意义且负责任的体验，该区域山地目的地正借助这一趋势，在保障旅游业发展的同时，保护独具区域特色的自然与文化遗产。数字化技术为缓解后疫情时代愈发严峻的过度旅游问题提供了创新路径。智慧旅游系统通过数据分析优化游客分布，缓解热门景点拥挤问题，并提升冷门景区曝光率。例如，地理围栏技术可实时监测并限制特定区域游客量，防止环境退化；配备废弃物追踪与回收功能的移动应用程序则引导负责任的旅游行为，有效应对生态敏感山区的污染问题。这些方案通过促进旅游业均衡发展与自然资源保护，契合后疫情时代的可持续发展目标。

2.3 亚太山地旅游与可持续性

2.3.1 经济可持续性

2.3.1.1 隐性负担

亚太地区山地可持续旅游对于保护脆弱生态系统、支持当地社区和保护文化遗产具有重要意义，然而，在实践过程中，政府、企业及社区等利益相关者需要承受显著的经济压力。山地旅游的发展依赖于大规模道路建设、清洁水系统及能源供应等基础设施，而由于偏远地区地形复杂、交通不便，建设成本更为高昂。此外，践行可持续理念要求使

用环保材料与设计，这无疑进一步抬高了建设成本。例如，相较于传统建造方式，采用生态影响最小化的住宿设施往往需要更高的初期投入。山地旅游目的地的废弃物管理也是不可忽视的关键问题，但实行起来成本昂贵。高海拔地区在废弃物运输上面临物流困难，需要专用设备和人力。此外，应对污染的措施，如安装先进污水处理厂或管理塑料垃圾，也给地方政府和私营运营商带来了持续的经济负担。实施和监测可持续实践涉及行政开支。主管部门需开展环境影响评估、执行法规并培训人员，从而有效管理可持续旅游活动。而定期监测旅游景点的承载能力及开展游客教育活动，也进一步增加了财政负担。

山地旅游尤其易受气候变化影响，因此亟需采取适应性措施。例如，随着天然降雪变得愈发不稳定，滑雪场不得不进行人工造雪，从而显著增加了运营成本。防洪设施和气候适应性基础设施等其他措施也进一步加剧了财政压力。推动社区旅游是可持续旅游的支柱，但其推广需要投入培训、能力建设和市场营销。此外，确保当地社区获得公平经济回报可能与利润最大化目标相冲突，需要政府提供补贴或税收优惠政策。作为可持续旅游的关键推动力，数字化涉及在线平台、数字导览和虚拟解说工具的开发和维护成本。发展中国家的小型运营商在获取和应用这些技术方面面临挑战。²⁰

2.3.1.2 季节性

亚太地区旅游的季节性对山地目的地的经济稳定性影响显著，涉及从当地社区到政府等各方利益相关者。游客量的高峰与低谷带来一系列经济挑战和机遇。

季节性旅游导致企业收入波动。旺季期间，游客大量涌入，通过住宿、餐饮、交通和娱乐消费带动当地经济增长。然而，淡季游客数量骤减，使企业难以覆盖租金、维护和工资等固定运营成本。

季节性需求在旺季创造就业机会，但淡季往往伴随着裁员或工时缩减。滑雪场和徒步目的地等山地旅游中心的劳动力因这种就业模式而面临经济不稳定。收入缺乏连续性使家庭难以维持财务稳定，社区也难以留住熟练劳动力。此外，为旅游旺季而建设的基础设施（包括酒店、交通网络和娱乐设施）在淡季往往利用率不足。这种闲置不仅意味着收入损失，也使得单位维护成本上升，造成资源配置效率低下。与此同时，游客在旺季期间集中到访，对山地目的地的自然资源造成压力，加剧环境退化。这种季节性压力要求额外的生态保护和恢复投资，从而加重了地方和区域财政的负担。

2.3.1.3 智慧科技旅游应用

技术在旅游业中的广泛应用显著提升了亚太地区山地旅游目的地的经济可持续性。通过提高运营效率、降低成本、创造新的就业机会及拓展收入来源，智能技术正以经济可行的方式重塑行业格局。这些技术不仅优化游客体验，更能通过减少浪费、优化资源利用和提升创收潜力，为旅游服务提供商带来成本节约与长期财务收益。然而，实现这些效益需要战略性投资与精细化管理。

虚拟现实（VR）与增强现实（AR）技术（详见第 2.3.4.1 节）在推动经济增长的同时，正改变游客参与模式并降低运营商成本。VR 使潜在游客能远程探索步道、模拟山地运动及体验目的地，从而降低营销成本并提高预订转化率。AR 通过在

真实景观上叠加交互式数字内容，为导览服务提供历史、文化及环境解说，从而提升游客满意度并延长停留时间——此举直接带动了当地商户的消费增长。日本长野县的 AR 导览遗产步道实践显示，该技术使游客参与度提升 20%，在为当地导游和商户创收的同时，减少了印刷材料与标识的需求。

配备二维码、电子路标和 AR 标记的智能步道系统，不仅丰富了游客体验，更通过减少印刷材料与人工导游需求提升经济效能。台湾阿里山国家风景区引入数字解说步道后，访客量增长 30%，同时传统导览相关的运营支出显著下降。这种转型帮助服务提供商更高效地配置资源，在保持游客参与度的同时降低人力成本。

大数据与机器学习通过需求预测、资源优化和运营浪费削减，对经济可持续性发挥关键作用。人工智能驱动的分析技术帮助业者动态调整定价模型，确保旺季收益最大化，同时维持淡季价格可承受性。通过对游客行为的分析，运营商可优化人员配置、提升库存管理效率并减少不必要支出。韩国济州岛的旅游需求预测系统已助力酒店及交通服务商将过剩库存与能耗降低 15%，在控制成本的同时实现收益最大化。此类优化显著增强了财务稳定性与市场波动抵御能力。

无人机技术通过大幅降低营销与安全运营成本，增强山地旅游经济韧性。高质量航拍摄影以远低于传统推广活动的成本提升目的地吸引力，实现低投入高回报的游客引流。此外，无人机在安全监测领域发挥关键作用，通过天气监控、危险预警及搜救支援降低运营商应急响应开支。尼泊尔喜马拉雅山区成功应用无人机进行路线安全监测与搜救，使救援成本削减约 40%，同时提升响应效率与游客安全保障。

嵌入生物识别传感器的可穿戴设备在提升游客安全性的同时，应用于高端探险旅游服务，开辟了新的收入来源。新西兰南阿尔卑斯山的运营商推出健康监测智能穿戴设备，提供分级安全套餐服



图 45 - VR 技术体验山地旅游（图源：ibaotu.com）

20 The Travel Foundation (2019). Destinations at Risk: The Invisible Burden of Tourism.

务，在保障游客安全的同时创造附加收益。这些创新还降低了运营商的赔偿责任风险，减少保险支出并提升盈利水平。

移动应用程序通过简化行程规划降低管理成本，同时刺激游客消费。实时天气、交通及票务信息提升服务效率，而集成预订系统则促进当地商户参与度。以澳大利亚蓝山地区为例，导航整合型APP使小型商业体交易量增长25%，充分体现了数字平台对地方经济的带动效应。此外，自动化预订流程与客户交互在节约人力成本的同时，提升了客户留存率与满意度。

尽管智能技术的优势显著，但其应用仍面临初始资本投入与持续维护需求的挑战。偏远地区数字基础设施建设仍需公私合作或定向补贴，以确保公平覆盖。然而，这类投资将通过降低运营低效与提升服务质量产生长期经济效益。此外，中小旅游企业可能难以与资金充裕的运营商竞争，这要求政策制定者推动数字技能培训并建立财政支持机制，以确保行业包容性增长与公平竞争。

在追求智能技术经济效益的同时，目的地应



图 46 - 无人机助力山地农业发展（图源：贵州日报）

重视“数字排毒”旅游的细分市场价值。意大利 Eremito 与不丹离网生态旅馆等案例证明，受网络影响程度低、高端沉浸式的旅游体验同样能创造收益并保护环境文化完整性。通过平衡技术创新与心智型旅游产品供给，目的地可满足多元化市场需求，保障长期经济可持续性。

亚洲开发银行（ADB）提出的智能技术应用框架，系统阐释了其在旅游多领域的适用路径。下表基于该框架，整合了亚太地区部分旅游领域的优秀实践案例。²¹

智能技术 - 良好实践旅游应用

领域	技术示例	良好实践案例
目的地管理	预警检测系统——由气象与地质传感器构成的监测网络，可探测恶劣天气、海啸及其他灾害现象，为应急响应提供关键应对时间。	印度洋海啸预警系统 (IOTWS) 在保护沿海旅游区免受海啸侵袭方面发挥着至关重要的作用。随着气候变化导致自然灾害风险加剧，在山区建立类似的预警系统具有同等重要性。 

21 Asian Development Bank (2024). Smart Tourism Ecosystem Development Readiness in Southeast Asia.

基础设施和可持续发展	节能旅游建筑——智能供暖、通风和空调系统减少能源消耗。	中国河南省的太阳能电池板台式手机充电器 
市场营销	大数据分析收集和分析游客人口统计、旅游选择和消费模式，为旅游营销策略提供信息。	由新加坡旅游局（STB）开发的新加坡旅游分析网络（Stan），收集和分析来自各种来源的大型数据集。 
旅行途中	电子签证——方便、透明的电子签证申请和签发提高了目的地的竞争力。	目前可前往越南、泰国、印度、柬埔寨和日本。） 
智能商务	智能酒店管理 - 集成智能解决方案，如自动登记系统，个性化经验和预防性维护。	长城上的二维码送餐系统。 

2.3.2 社会文化可持续性

2.3.2.1 社区

亚太地区山地旅游对在地社区的社会文化兼具积极和消极影响。该区域丰富的文化遗产、传统习俗及独特生态系统使其成为旅游热点，但游客激增也深刻改变了在地生活方式。旅游促进文化交流，使社区得以向游客展示传统工艺、节庆活动与生活形态，此类交流加深了跨文化理解与认同，推动了地方遗产的全球认知提升。社区主导型旅游项目通过展示手工艺、表演艺术等传统技能，赋能在地群体，助力文化保护与复兴。

旅游经济收益也为文化遗产维护提供支持。旅

游收入常被再投资于历史遗址保护、传统节庆资助及原住民实践传承。此外，游客互动促使年轻世代重视文化遗产并维系文化根源。

不过，旅游业也可能导致文化特性的消解。文化元素为迎合游客而被商品化，可能会削弱其真实性。长此以往，这一过程会侵蚀社区的文化架构，降低其遗产价值。游客大量涌入还可能引发社会矛盾，当地居民与游客之间的差异愈发凸显。生活成本上升、房价高涨以及对旅游收入的过度依赖，给当地资源带来压力，改变社区生态。旅游旺季的文化冲突与过度拥挤，也会进一步干扰了传统生活方式。

案例研究

越南沙坝（Sapa）山地旅游业的社区文化可持续性

沙坝地处越南老街省，是文化多样性与自然景观富集的核心区域。坐拥巍峨群峰与葱郁梯田，当地少数民族村落构成了其旅游吸引力的精髓。该地区聚居着赫蒙族、瑶族和岱族等多元社群，其鲜活的文化传统与生活方式为访客提供原真性体验。过去二十年间，沙坝经历了从农业经济向旅游经济的重要转型，这一转变既带来发展机遇，也伴随着多重挑战。

核心旅游资源

- 沙坝最具特色的旅游资源集中体现于老寨、塔万、猫猫等少数民族村落。这些社区为游客提供织锦技艺、靛蓝染色、传统音乐及特色美食等文化实践，家庭寄宿项目通过深度文化互动增强游客体验，同时为当地家庭创造经济收益；
- 少数民族群体制作的特色纺织品、银饰及手工艺品在沙坝市场等商贸集散地流通。这些工艺制品不仅维系文化传承，更为以女性为主体的手工艺者创造可持续收入来源；
- 尽管以梯田景观和番西邦峰为代表的自然景观享有盛誉，但此类旅游资源与从事农耕生产和徒步向导服务的少数民族社群存在深度依存关系。

经济结构转型

历史上，水稻种植与畜牧养殖构成沙坝主要生计方式。旅游业兴起显著改变了区域经济格局，

当前旅游收入已超越传统农业成为经济支柱。少数民族家庭通过经营家庭寄宿、提供导览服务及销售手工艺品参与旅游经济，女性群体通过向游客销售手工纺织品与纪念品实现经济赋权。

旅游收益部分转化为社区教育与医疗资源，但过度依赖旅游业也使该地区易受客流量波动影响，新冠疫情期间的全球旅游业停滞即暴露出此类脆弱性。

现存挑战

- 旅游需求激增导致民族文化表演与手工艺出现“商品化”趋势，部分文化实践为迎合游客预期而偏离原生形态；
- 热门村落与自然景区面临游客超载压力，引发垃圾处理与生态环境退化难题；
- 旅游收益呈现空间分异特征，偏远地区家庭仍主要依赖传统农耕，未能充分享受旅游发展红利。

可持续旅游与前景展望

当前多方力量正致力于平衡经济发展与文化生态保护。在非政府组织与地方政府支持下，以社区为主导的旅游项目通过提供可持续管理工具增强少数民族自主发展能力。生态旅游与低环境影响的徒步旅行、文化工作坊等项目规模持续扩展。通过坚持包容性发展原则并维护少数民族文化完整性，沙坝有望在保持独特文化标识的同时，实现旅游产业对区域社会的整体带动效应。



图 47 - 越南的沙巴文化和山地旅游体验（图源：PATA 提供）

2.3.2.2 文化

文化是亚太旅游的核心要素，其传统、遗产与习俗多样性构成吸引国内外游客的首要因素。这种文化禀赋不仅提升游客体验，更促进社会经济增长与在地身份认同维系。亚太文化多样性与旅游吸引力深度交织。历史地标（如日本京都的寺院与茶道文化）、传统节日及原住民工艺每年吸引着无数游客，彰显文化遗产对独特体验追求者的磁吸效应。

当代游客日益倾向于以社区为基础、具有深度文化浸入感的体验，以此建立与地方传统的深层联结。参与文化节庆、学习传统工艺或探索历史遗迹等活动，不仅为游客提供丰富真实的文化体验，同时为地方经济注入活力。旅游业通过创造可再投资于遗产保护的经济收益，支撑了文化实践的传承。例如，文化遗产地的门票收入往往被用于维护与修复工程。此外，文化旅游还为传统手工艺和表演艺术创造市场空间，使这些技艺得以存续发展。

尽管旅游业在文化保护方面发挥了积极作用，但也可能导致文化商品化与真实性流失。为迎合游客偏好而改造传统习俗，可能削弱其原始内涵与价值。文化遗产地的过度拥挤现象，以及游客与当地居民间的文化摩擦，可能加剧社群关系紧张，并威胁旅游业可持续性。为实现文化与旅游的协调发展，可持续实践必须坚持真实性原则，强调在地社区参与和利益均衡分配。这一路径将确保文化遗产作为亚太地区旅游业不可或缺的组成部分，持续焕发其活力。

2.3.3 环境可持续性

2.3.3.1 水和固体废物管理

水资源与固体废物管理是亚太地区山地旅游可持续发展的核心挑战。旅游旺季的高客流量常超出在地水处理与废弃物管理系统的承载能力。塑料污染问题尤为突出，“塑料雨”现象（即在喜马拉雅山脉、新西兰南阿尔卑斯等偏远山地检测到微塑料）凸显了问题的严峻性。若管理失当，旅游活动产生的废弃物将导致水土污染，进而威胁生态系统与社区健康。

山地旅游用水问题，尤其是滑雪场及高端住宿设施的用水，常导致水资源过度开采，不仅消耗淡水储备，更破坏敏感山地生境的生态平衡。此外，旅游运营产生的未达标处理废水会污染溪流湖泊，危害水生生物多样性。

亚太地区的缓解策略包括禁用一次性塑料制品、推广循环利用计划、加强游客负责任的废弃物处置教育。厌氧消化、堆肥系统等先进废弃物处理技术正应用于旅游运营体系，以降低环境影响。在水资源管理领域，灰水回收系统与高效灌溉技术有助于平衡旅游业需求与当地资源供给。区域内众多山地旅游目的地正加速实施此类可持续实践，既保护其脆弱生态系统，也为依赖旅游业的社区创造长期发展韧性。

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2.3.3.2 温室气体排放

山地旅游是温室气体排放的重要来源，主要来自交通、高能耗住宿设施及滑雪场等娱乐设施的运维。其中，航空与自驾车等交通排放占主导地位，加剧偏远目的地的碳足迹。温室气体效应对气候变化敏感的山地生态影响尤甚——全球升温导致洪水、干旱与热浪等极端天气频发，脆弱区域首当其冲。例如，滑雪场为应对降雪减少而大量使用人工造雪技术，该过程消耗了大量水资源与电力。

亚太地区正加速推广电动车及低碳燃料应用，并通过政策引导旅游基础设施采用可再生能源与能效提升技术。然而，可再生能源技术的高昂成本以及旅游排放数据体系的不完善等问题仍然制约着减排进程。

应对山地旅游碳排放需要多维度策略：完善公共交通以减少对私家车的依赖、激励住宿业应用低碳技术、投资可持续建筑实践。结合严格法规与社区参与，可系统性降低山地旅游碳足迹。



图 48 - 山地风电站（图源：qxkp.net）

2.3.3.3 可再生能源

可再生能源正成为亚太山地旅游可持续发展的基石。太阳能、风能等清洁能源被广泛应用于山地目的地，以降低环境负荷并提升长期韧性。区域内的生态度假村通过高效保温建材、余热回收技术及传感照明系统，进一步优化能耗。

部分亚太山地住宿项目通过创新绿色技术实现了“零水耗、零电耗、零排放”。例如，喜马拉雅与日本山地的生态度假村利用太阳能供电并配置智能温控系统，在保障游客舒适度的同时减少能源浪费。不丹依托水电资源维持旅游运营，巩固其全球少有的碳负排放国地位。

尽管进展显著，山地旅游可再生能源应用仍面临初始投资高、偏远地区部署困难等挑战。为此，政府与利益相关方正通过财政激励、公私合作及储能技术投资突破瓶颈，确保能源供应稳定可靠。

2.3.4 可持续发展的新兴技术和应用

2.3.4.1 人工智能与虚拟现实

亚太地区拥有全球标志性的山地旅游目的地，其平衡旅游增长与环境可持续性的挑战日益严峻。新兴技术（尤其是人工智能与虚拟现实，如 2.3.1.3 节所述）为此提供了变革性解决方案。此类技术正加速融入智慧旅游生态系统（中国案例见下文），旨在提升目的地竞争力、优化游客体验并支持可持续发展。

人工智能（AI）

AI 是智慧旅游生态系统的核心，通过整合先进数字技术提升目的地运营效率、可持续性吸引力。AI 驱动平台可实时分析海量数据，为运营商提供决策依据。通过监测游客行为、预测需求及优化资源配置，AI 助力山地旅游管理实现科学决策。例如，AI 在智慧旅游生态系统中的应用可辅助山地地区决策者优化基础设施建设，如规划节能型住宿设施或废弃物管理系统。AI 平台通过分析季节性需求趋势，指导投资，避免过度开发并保障旺季服务能力。AI 还通过提供旅游热点实时信息，显著改善游客体验。例如，新加坡的“MySentosa”应用程序可监测人流密度与等候时长，帮助游客调整行程，避开拥挤区域。在山地旅游中，此类工具可缓解热门步道或遗产地的过度拥挤问题，降低生态压力并提升游客满意度。AI 通过优化能源与水资源利用强化可持续性。例如，AI 系统可智能调控住宿设施的供暖、制冷及照明能耗，在保障舒适度的同时提升能效；AI 驱动的废弃物管理系统通过监测处理模式动态调整清运频率，防范环境污染。此外，AI 还能管理脆弱山地生态系统的环境风险。例如，基于 AI 的预测性分析可实时监测气象数据，识别潜在滑坡风险，并向游客及管理部门预警。这种前瞻性策略不仅提升安全性，还减少了旅游活动的生态影响。

虚拟现实（VR）

虚拟现实技术使游客可在出行前沉浸式体验山地目的地，其功能包括：辅助游客决策、减少非必要出行、传播目的地可持续实践认知。VR 可展示徒步路线、文化地标及生态保护项目，激发游客对环保倡议的支持。通过提供自然与文化遗产的交互式教育内容，VR 增强实地体验深度。例如，游客可使用 VR 设备探索生态保护禁入区域，或在不干扰社区生活的前提下了解在地文化历史。此类创新既减少旅游物理足迹，又深化游客参与感。

协同效应

AI 与 VR 的协同应用可放大可持续效益。整合

两者的智慧旅游生态系统能实现游客流精准管理与资源高效配置。例如，当 AI 识别出拥挤区域时，VR 可推荐替代景点以分流游客，缓解敏感区域压

力。此外，这些技术支持长期规划：AI 分析为政策制定提供依据，VR 模拟可预演开发项目的环境影响，辅助利益相关方在实施前评估风险与收益。

案例研究

中国山地旅游数字化解决方案

中国积极投身智慧旅游领域，致力于革新旅游体验，特别是在山地旅游方面成果显著。通过深度融合先进数字技术与可持续发展理念，中国让旅游变得更为便捷、个性化且环保。智能旅游借助移动应用程序、人工智能（AI）、物联网（IoT）以及增强现实 / 虚拟现实（AR/VR）等技术手段，极大地提升了游客参与度与目的地管理水平。

中国智慧旅游的构成要素

- 移动应用程序：助力游客优化旅行规划，实现精准导航，便捷完成各类预订，为游客出行提供全方位支持；
- 物联网：通过连接各类设备，实现无间断通信，确保游客能实时获取最新信息，提升旅游体验的流畅性；
- 人工智能与大数据：依据游客偏好及行为数据，提供个性化旅行建议，同时助力旅游资源实现高效管理与优化配置；
- AR/VR：为游客打造沉浸式体验场景，丰富旅游过程中的教育内容，让游客深度感受旅游目的地魅力；
- 可持续性工具：融入太阳能设施等环保技术，在推动旅游发展的同时，坚持绿色可持续理念，促进旅游业与生态环境的和谐共生。

中国山地智慧旅游实践

- 游客游览长城山地时，能享受二维码带来的独特高效服务。在休息区，游客扫描二维码，即可订购零食、水或纪念品，所购物品会直接送达其所在位置。这既减轻了游客在陡峭地形携带物资的负担，提升了便利性，又利于管控包装、优化废物管理，最大程度减少乱扔垃圾现象。
- 在中国各地山地博物馆，AR 和 VR 技术赋予古代岩画鲜活生命力。游客借助 VR 耳机，可虚拟探索洞穴绘画与文物，深度了解当地早期定居者的生活。交互式 AR 功能将数字重建内容叠加到真实景观上，营造引人入胜的教育体验；
- 为兼顾可持续性与便利性，众多山路及休息区配备了兼具电话充电功能的太阳能电池板长椅。游客借此能随时保持通讯，同时推动可再生能源利用，降低偏远地区对传统充电基础设施

的依赖；

- 中国的智能旅游应用程序可实时更新热门山地目的地的步道状况、天气及游客拥堵信息。游客据此能有效规划行程，避开拥挤路线，降低对环境的影响。此外，部分地区还投入使用以可再生能源为动力的环保型穿梭巴士，在保障便利出行的同时，将污染降至最低。
- 在贵州西江千户苗寨，搭载人工智能技术的机器狗正被用于协助人群监测、安全巡逻和环境监控。这些四足机器狗能够提供实时的游客流量数据，有助于应对高峰时段并缓解拥堵。它们配备了摄像头和传感器，可加强景区安全保障，并向游客发布通知。它们的应用体现了中国在景区管理中对机器人技术日益广泛的融合。通过支持智能化监管，这些人工智能机器狗助力打造更安全、高效且科技赋能的旅游体验。²²

积极影响

中国在山地推进的智慧旅游项目，彰显出科技在提升旅游体验的同时，促进可持续发展与文化保护。借由整合数字方案，这些项目为游客带来更多便利，助力当地经济发展，落实环境管理。它们的成功实施凸显出智慧旅游在塑造全球山地旅游未来格局上的巨大潜力。



图 49 - AI 机器狗助力贵州游客（图源：PATA 提供）

2.3.4.2 可持续实践与国际标准的推广

亚太地区各旅游目的地正加速推行可再生能源使用、废弃物减量计划、可持续交通系统及负责任的用水与能源管理等举措，这些实践与联合国可持续发展目标 12（负责任消费与生产）及目

标 13（气候行动）具有高度协同性。全球可持续旅游委员会（GSTC）作为致力于制定与管理全球可持续旅行标准的国际组织，在推动旅游价值链可持续发展方面处于国际领先地位。其制定的 GSTC 标准为旅游企业、目的地及机构构建负责

22 <https://en.people.cn/n3/2025/0109/c90000-20264044.html>

任的旅游实践框架，涵盖四大核心领域：可持续管理、社会经济影响、文化可持续性与环境保护。其中，GSTC 行业标准适用于酒店与旅行社，而 GSTC 目的地标准则为区域层面的可持续旅游发展提供指引。通过认证计划、培训与资质认定体系，GSTC 协助利益相关方对接国际最佳实践，确保旅游业对在地社区、文化遗产与环境保护产生积极效益。²³ 比如，日本已在多个山地旅游区实施零废弃政策，引导游客最大限度减少生态足迹。此外，新西兰山地度假区对可再生能源的优先使用，展示了可持续实践如何有机融入旅游基础设施。这些创新举措不仅有效降低环境影响，更能吸引具有环保意识的游客群体，为山地旅游的长期韧性发展注入动力。

2.3.4.3 国际指标衡量绩效

除全球可持续旅游委员会（GSTC）标准外，

公共与私营部门利益相关方还采用其他重要国际指数评估旅游经济体的全球竞争力表现。世界经济论坛制定的“旅行与旅游业发展指数（TTDI）”是一个广受认可的战略性基准评估工具，用于衡量全球旅游经济体发展水平。该指数为政策制定者、企业与利益相关方提供关键洞见，揭示各国旅游经济的优势领域与发展短板，助力推动旅游业的增长与可持续转型。作为制定政策与投资战略的参考依据，TTDI 还充当了行业对话平台，聚焦新兴趋势、潜在风险与创新模式，从而增强全球旅游业的韧性与长期可持续性。²⁴

下图展示了中国在 2024 年指数评估中的表现，中国凭借卓越的安全环境（如低犯罪率与政治稳定性）及世界级旅行与旅游资源（如丰富且独特的自然文化禀赋），位列全球第 8。

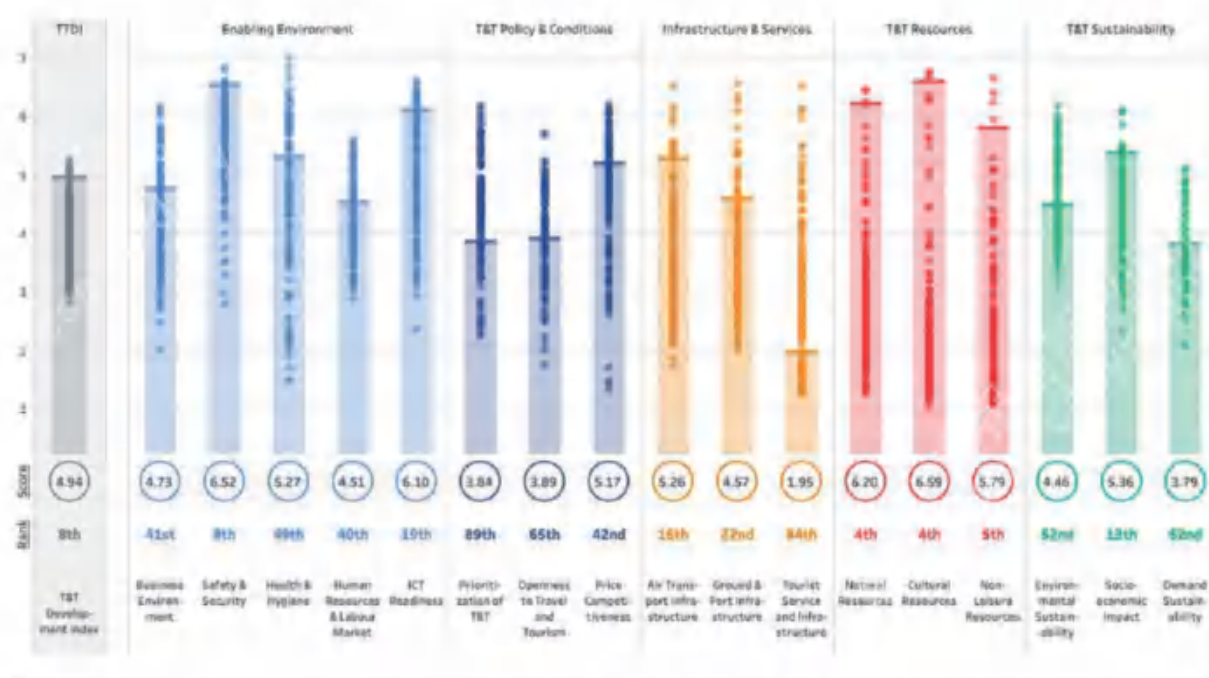


图 50 - 2024 年中国旅游发展指数排名

23 www.gstcouncil.org/

24 World Economic Forum (2024). Travel and Tourism Development Index 2024.

世界旅游及旅行业理事会（WTTC）与牛津经济研究院合作，定期对旅行与旅游业在全球范围内的经济、社会及环境影响足迹开展综合性评估。通过在全球、区域及国家层面整合关键数据与指标，该倡议为行业深远影响提供有价值的洞见，并使各国得以初步了解自身在可持续措施中的相对竞争力。这种数据驱动型方法助力政策制定者、企业与利益相关方做出基于充分信息的决策，推动旅游业实现可持续且负责任的发展。

2.4 亚太山地旅游业的优势、机遇、约束和风险

2.4.1 SWOT 分析

下表为与亚太地区山地旅游相关的 SWOT 分析，本报告前文已对这些内容进行了阐述。该分析重点聚焦宏观问题，并非涵盖所有细节。

优势 (STRENGTHS)	机遇 (OPPORTUNITIES)
- 山地景观与地形多样性 - 全球最为丰富的文化与语言多样性 - 多元化的山地旅游体验与活动资源 - 亚太地区拥有众多具有世界影响力的宗教遗址与景观（如佛教、印度教与伊斯兰教相关遗产） - 亚太地区文化丰富多元 - 亚太地区孕育了若干全球知名的待客文化传统	- 受气候变化引发的城市热岛效应影响，游客将持续寻求山地旅游区的环境庇护功能 - 亚太地区人工智能等数字化技术呈现高速应用态势 - 通过构建以交通枢纽为起点的环保型交通工具供给体系，提升山地度假区最后一公里交通可达性 - 善用山地旅游促进人文交流，增进跨国游客间的文化互鉴 - 推进亚太山地旅游目的地国际协同合作（包括优质实践案例共享机制建设） - 探索建立山地旅游发展成效的新型评估范式 - 面向中小企业提供能力建设支持（重点涵盖人工智能等数字技术在营销推广、运营管理及客户满意度监测中的应用） - 完善亚太区域航空网络布局 - 实施区域签证便利化措施以激发旅游市场活力
劣势 (WEAKNESSES)	威胁 (THREATS)
- 对当地社区的边际效益有限 - 安全状况参差不齐，常不符合国际标准 - 山地旅游业熟练劳动力短缺，影响之一是因缺乏标准与培训导致服务质量参差不齐 - 服务提供者对游客需求认知不足（因从业者自身缺乏旅游体验） - 饮用水供应有限，导致依赖塑料瓶装水 - 新鲜蔬菜与蛋白质的可靠供给不足，致使餐饮选择呈现不达标且重复单一的依赖进口模式 - 依赖公路的交通基础设施导致缺乏最后一公里环保交通方式 - 交通规划不足，如道路基础设施不完善、承载力有限及过度依赖汽车，导致游客过度集中、碳排放过高及游客满意度下降	- 气候变化引致的天气模式多变性与不可预测性 - 高山旅游地降雪及滑雪季缩短，导致行业营收下降 - 自然灾害频发（如洪水、山体滑坡与泥石流） - 来自成熟山地旅游地的全球竞争压力（其具备更优质的交通基础设施，如环保型公共交通设施与便捷的航班通达性） - 技术快速变革与产业转型 - 公共卫生威胁（含流行病风险） - 全球经济不确定性引致的旅游意愿与消费能力双重缩减

表 3 - 亚太地区山地旅游 SWOT 分析表

2.4.2 实操建议

“如果我们能提升其可持续性，山地旅游将继续展现其能力：在创造经济活力、提供就业岗位、消除贫困与增强本土文化的同时，适应地球环境必然发生的变化。”

——弗朗西斯科·弗朗加利（Francesco Frangiali），联合国旅游组织（UNWTO）前秘书长



本报告基于 SWOT 分析提出可操作性建议，旨在支撑第三章将系统阐述的未来发展计划。当前，亚太山地旅游正在持续演进：技术进步与交通基建的完善使偏远地区可达性显著提升，尼泊尔、日本、新西兰等目的地每年吸引数百万游客，提供徒步、滑雪及文化体验等多元产品。然而挑战依然存在：气候变化对山地生态系统构成重大威胁，冰川消融与气候模式改变不仅破坏自然景观的美学价值，也危及在地居民的生计；过度旅游现象引发关注，脆弱的山地环境难以承载持续增长的游客规模。为缓解气候变化与过度旅游对自然环境的双重冲击，本区域山地旅游开发亟需系统整合保护措施，具体路径包括：推进社区参与的生态旅游模式，实施负责任的游客管理体系，建立激励生态保护的可持续生计机制。具体措施可涵盖脆弱区域游客容量管控、旅游运营商生态认证制度设计，以及将旅游收益再投资于生态保护与社区发展的收入共享模式。通过深化公私部门合作、运用原住民传统生态智慧并强化保护教育体系，山地旅游可转化为兼具环境保护与社会经济韧性的发展动能，确保这些珍贵景观得以世代传承，成为可持续旅游目的地。当前，可持续旅游推广举措正加速实施，例如喜马拉雅山区村落推行的社区旅游模式、马来西亚高原生态旅舍建设，以及退化山地再造林工程等创新实践，均展现出积极成效。

2.4.2.1 过度旅游与气候变化

应对气候变化与过度旅游的双重挑战需采取多维度策略。利益相关方应通过推广环保型住宿

设施、支持生态保护行动和倡导负责任旅行行为，优先实施可持续旅游实践。政策制定者需制定监管政策与激励措施以降低旅游业环境影响，例如对脆弱生态系统实施游客流量管控，并投资绿色基础设施。推动在地社区深度参与，既能保障其在文化遗产保护中的主体地位，又有助于实现经济利益的公平分配。游客可通过选择以可持续性为核心的旅游目的地与活动、主动参与碳抵消项目等方式减少生态足迹。有效应对气候变化与过度旅游问题，不仅有助于环境保护，更能提升整体旅游体验品质，深化游客与目的地间的情感联结。

2.4.2.2 社区主导旅游扶贫发展

社区主导型旅游模式在推动益贫式发展方面展现出显著潜力，对亚太山地社区尤为关键。赋权在地社区，特别是女性与边缘化群体，是旅游成功运营的核心要素，因其参与能确保旅游活动与本土文化遗产相契合，并强化社区主体性。为实现此目标，需为社区提供旅游资源测绘与体验产品开发的专业培训。产品开发能力建设需配套营销技能提升计划，以吸引追求山地真实体验与深度文化感知的游客群体。优先推进社区参与机制，不仅能促进经济发展，更能提升社区整体福祉，有力诠释“宜居之地即宜游之地”理念。

2.4.2.3 旅游价值链数字化

旅游价值链数字化将赋能亚太山地旅游的可持续发展。通过整合先进技术，利益相关方可优化运营流程、提升服务质量并高效监测环境影响。数字化平台可促进旅游运营商、住宿设施、在地社区

与游客间的顺畅协作，实现资源高效管理，提升客户满意度。数据分析与实时监测系统的应用有助于预判游客行为、优化资源配置并减少浪费。此外，数字工具通过精准追踪旅游活动数据，在环境影响监测与减缓、可持续实践开发及保护行动支持中发挥关键作用。当前以 DeepSeek、ChatGPT 等大语言模型为代表的主流 AI 应用，正重塑行业沟通与研究方式，为旅游营销者传播产品价值主张提供技术支撑。总体而言，数字化将重构旅游价值链，在驱动增长的同时促进生态保护与社区福祉。

然而，AI 与 VR 技术在山地旅游中的应用仍面临挑战。高昂实施成本、专业技术门槛及偏远地区数字基建短板制约了部分目的地的技术可及性。政府、私营部门与国际组织可通过资金支持、能力建设及技术共享等合作机制突破瓶颈。随着亚太持续推进技术革新，AI 与 VR 的整合为山地旅游可持续转型提供路径，通过优化游客体验、集约资源利用及保护脆弱生态，确保旅游开发与环境和社区福祉协同发展。此类技术的采用将在构建面向未来的韧性生态友好型山地目的地中发挥关键作用。

2.4.2.4 IMTA 的引领作用

国际山地旅游联盟（IMTA）通过汇聚利益相关方、编制系统性知识报告及推广最佳实践等举措，在推动山地旅游可持续发展中发挥核心作用；通过构建政府、企业、社区及国际组织等多方协作网络，凝聚可持续山地旅游发展共识。其发布的行业报告深度解析行业趋势、挑战与机遇，为决策者提供战略洞见。同时，IMTA 积极推广创新解决方案，促进山地旅游业可持续发展、山地文化传承保护以及山地经济增长。

本报告建议，未来 IMTA 可通过以下方式提供规划支持：1）协助山地旅游目的地管理机构探究景点承载力阈值，推介备选游览路线与特色景点，促使游客合理分流，规避单点过度旅游；2）倡导发展公益旅游项目，推动社区基建改善，助力山地社区共享旅游收益；3）探索构建亚太山地旅游绩效指数，科学评估目的地运营效能。通过这些举措，IMTA 将持续推动环境友好性、社区受益性山地旅游提质升级。



图 51— 国际山地旅游联盟（IMTA）总部（图源：IMTA 提供）

3

引言与背景

Mount Huangshan · China
中国黄山

第三章 战略展望与建议

3.1 亚太山地旅游的可持续发展展望

亚太地区山地旅游发展潜力巨大，既是区域经济增长的重要引擎，更是推动可持续发展的重要催化剂。本章立足亚太山地旅游业面临的挑战与机遇，针对山地旅游行业展开探索并提出产业发展专项建议，以确保区域山地旅游可持续发展的长效性。

随着产业发展持续演进，山地旅游在促进可持续发展中的作用日益凸显。该产业能够平衡经济增长、生态保护与文化遗产，造福于山地民众。为实现这一目标，必须树立培育韧性、包容性和环境责任感的长期愿景。通过贯彻落实这些核心原则，亚太山地旅游不仅能蓬勃发展，还可为全球山地旅游发展树立典范。本章将从产业提升、应对挑战和可持续发展等多个维度，提出亚太山地旅游高质量发展的策略。

3.1.1 2030 年亚太山地旅游愿景

——到 2030 年，亚太山地旅游业应成为全球可持续性、创新性与包容性发展的标杆。

“2030 年亚太山地旅游愿景”旨在实现山地社区的繁荣发展，既通过旅游业获取经济收益，又完整保护其独特的文化与自然遗产。山地旅游目的地不仅是自然景观胜地，更将成为负责任旅游的核心枢纽，游客通过深度体验参与到旅游活动中，充分尊重和保护地方传统与地貌环境。

现代旅游基础设施和技术将与传统文化遗产实现有机融合，确保发展不以牺牲原真性为代价。在提升交通可达性与数字连通性过程中，将恪守生态平衡原则，依托可持续交通体系和数字化解决方案优化游客体验。政府、企业与在地社区需协同制定政策框架，以缓解环境退化并应对气候变化问题。通过强化监管机制与负责任商业实践，旅游业将构建韧性抵御体系，有效应对从经济波动到自然灾害等外部冲击。亚太山地旅游业的未来发展将以创新驱动、生态保育与包容性经济增长为核心特征，成为全球可持续旅游范式。

过度增长的游客规模将对脆弱山地生态系统造成压力，引发水土流失、废弃物堆积及文化稀释等问题。通过空间分区管控、承载力限制及可持续基础设施投资进行游客量调控至关重要。政策应秉持“质量优先于数量”原则，延长游客停留周期，开发多元化旅游产品以实现全年均衡客源分布。地方政府亟需构建兼顾经济效益与生态系统保护的山地旅游治理框架。

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3.1.2 预期成效 / 目标

主要成效	描述
旅游经济良性增长	山地旅游收入的公平分配将使当地社区从中充分受益，同时稳固当地经济可持续发展的根基，推动旅游经济良性增长。
构建低碳旅游环境	削减山地旅游活动产生的碳排放量，保护生态系统和生物多样性，减少污染，确保负责任的废弃物与水资源管控。
守护和传承文化遗产	通过推广展现本真特色的山地文化旅游并出台直接惠及遗产守护者的政策，实现对原住民以及当地传统习俗的有力保护。
提升气候变化适应力	山地旅游基础设施与相关政策将融入气候变化应对措施，如植树造林计划与灾害预警等气候适应举措。
提升旅游体验和品质	加大对数字创新技术的投入力度，改善山地基础设施，提升旅游服务质量，从而有力保障游客能够享有安全且富有教育内涵的沉浸式旅游体验。

3.1.3 指导原则

亚太山地旅游发展战略应基于以下原则：

- **可持续性**：积极响应联合国可持续发展目标，将生态保护、文化传承和经济发展有机融合，实现亚太山地旅游的长期、稳定、健康发展。
- **合作共赢**：加强政府、企业和当地利益相关者之间的合作，建立健全协同机制，整合各方资源与力量，形成发展合力，实现优势互补、互利共赢的良好格局。
- **质量导向**：注重发展高效益责任旅游，将发展重心从追求数量和规模转向提升质量，提供高品质旅游产品与服务，增强亚太山地旅游的吸引力和竞争力。
- **社区优享**：确保在地居民成为旅游业发展的首要受益主体，通过旅游产业带动当地就业、增加居民收入，促进社区全面发展，让居民共享旅游发

展成果。

- **技术创新**：借助技术提升旅游体验、优化管理与监测，充分发挥人工智能及其他数字创新技术的优势，推动旅游服务智能化、管理精细化，为亚太山地旅游注入创新动力。

3.2 战略建议

为实现“2030年亚太山地旅游愿景”，为亚太山地旅游业提出具有前瞻性、针对性的战略建议，对于凝聚各方共识、整合优势资源、破解发展瓶颈，推动亚太山地旅游业在复杂环境中稳健前行，发挥其在区域可持续发展中的独特价值具有重要意义。秉持最具战略价值的方向性理念，亚太地区可确保山地旅游持续作为可持续发展的基石，在创造经济机遇的同时，守护目的地独特的自然生态与文化遗产。



图 52- 亚太地区山地旅游发展的指导原则

作为全球唯一以“山地旅游”定位的国际组织，国际山地旅游联盟（IMTA）在推动亚太地区山地旅游发展方面具有重要引领作用。在亚太山地旅游可持续发展的重要议题上，国际山地旅游联盟（IMTA）需与联合国旅游组织（UN Tourism）、亚太旅游协会（PATA）等权威组织加强协作，共同推动实质性变革，从而确立该地区在全球负责任可持续旅游发展中的领先地位，进一步与世界自然保护联盟（IUCN）、联合国粮食及农业组织（FAO）等行业专业机构建立伙伴关系，联合开展研究、促进最佳实践的交流和，并协同引导亚太山地旅游业相关投融资合作项目，助推旅游产业的高质量建设。国际山地旅游联盟（IMTA）与各利益相关方及合作伙伴可采取以下措施优化沟通协作机制、提升战略协同效能：

1. 构建集中化数字平台，为各方提供精准、及时的信息支持，提高信息共享效率与协作项目管理能力；
 2. 通过举办主题活动、论坛与研讨会，促进会员间对话交流与知识共享；
 3. 制定清晰、明确、系统且具有可操作性的决策流程与争议调解机制；
 4. 积极推行跨文化沟通培训项目，充分考虑到多元利益相关方来自不同的文化背景，通过专业的培训课程，提升各方在跨文化环境下的沟通能力和协作效能。让各方能够更好地理解和尊重彼此的文化差异，减少沟通障碍，提高合作的默契度。
- 更广泛而言，多项战略建议值得优先纳入亚太山地旅游行业相关机构的行动纲领、工作计划、活动议程与对外传播体系。本报告列出国际山地旅游联盟（IMTA）联合业界合作伙伴可共同实施的 **37 项建议举措，涵盖六大主题领域**，为亚太山地旅游可持续、高质量发展提供战略支撑。

3.2.1 可持续性目的地管理（6 项举措）

1. 借鉴国际最佳实践制定亚太地区山地旅游可持续发展标准化措施，为亚太地区山地旅游的可持续发展提供明确的指导和规范，确保旅游活动在生态、社会和经济层面的平衡发展；
2. 与全球可持续旅游委员会（GSTC）等国际

权威认证体系展开紧密合作，设计适用于亚太地区山地旅游的生态友好型运营标准和要求，推动整个行业向绿色、可持续方向转型；

3. 积极推动建立针对亚太地区山地旅游敏感区域的游客容量上限及分区政策指南，通过科学的承载力评估确定合理的山地旅游目的地游客容量上限，制定相应的管理策略和游客引导措施，降低过度旅游风险；

4. 依据联合国旅游组织（UN Tourism）发布的相关指南及国际成功案例，探索制定针对亚太山地社区旅游企业的培育和扶持计划，鼓励和引导当地社区居民参与旅游开发，创办具有地方特色的旅游企业；

5. 探索建立符合亚太山地旅游特色的本土化服务质量标准体系，从旅游住宿、餐饮、导游服务到旅游活动项目的设计，都将充分考虑当地社区的文化特质、生活方式和传统习俗，并通过严格的质量监督和评估机制，保障旅游服务质量的稳定性；

6. 大力倡导生态保护、修复及美化行动，联合区域利益相关方资源及力量参与实施，建立长效合作机制，制定科学合理的生态保护规划和行动计划，通过植树造林、水土保持、生物多样性保护等措施，修复和改善山地生态环境，为亚太山地旅游的可持续发展奠定坚实的生态基础。

3.2.2 气候变化与应对策略（6 项举措）

1. 积极推广碳中和旅游倡议，通过举办峰会、组织研讨会、开展论坛等形式促进业界的知识共享与最佳实践互鉴，学习借鉴各地的先进技术和管理模式，鼓励亚太山地旅游目的地参与有关“应对气候变化议题”的国际合作项目；
2. 依托亚太地区现有危机沟通与灾害防御机制，推动相关机构整合高敏感山区的气象、地质、环境等多源数据信息，探索构建一套全面、高效、精准的气候相关灾害预警系统，并利用先进的监测技术和数据分析方法，及时准确地预测暴雨、洪水、山体滑坡、雪崩等灾害的发生；
3. 通过多利益相关方协同机制，加强山地旅游目的地与周边国家和地区的合作交流，通过跨境合作，实现信息共享、技术互补和联合行动，共商气

候适应战略、生态保护行动及政策干预措施，提高应对气候变化的整体效能。

4. 探索制定“亚太山地旅游碳中和基础设施专项计划”，加强清洁能源设施、节能建筑、绿色交通等方面的投资和建设，推动实施植被恢复工程，倡导负责任的资源消费行动。

5. 积极参与亚太各国的气候适应减缓战略制定和资金机制建设，鼓励旅游企业采用清洁能源、推广绿色旅游产品和服务，促进气候友好型旅游实践。

6. 普及气候变化知识和可持续发展理念，提高公众的环保意识和责任感，引导游客文明旅游、绿色消费，加强对旅游从业者的培训，提高他们在应对气候变化和可持续旅游管理方面的能力。

3.2.3 基础设施建设与智慧互联(5项举措)

1. 推广山地旅游目的地可持续低碳交通方案（如使用清洁能源接驳车、缆车系统），汲取中国等在可再生能源应用与生态友好型解决方案投资领域的先进经验。

2. 积极倡导开发并试点综合性数字化山地旅游目的地管理体系，包括构建数据指标体系及其他数字支持服务，如利用大数据、云计算等技术实现对游客流量的实时监测和精准调控，通过智能导览系统为游客提供个性化的旅游服务等，以优化游客管理、精准评估游客反馈，提升游客的互动体验。

3. 采用 LEED 绿色建筑认证或其他国际权威认证标准，指导山地旅舍与度假区的可持续建筑设计与运营，并在区域层面推广实施，通过政策引导、资金支持等方式，鼓励更多的山地旅游建筑项目获得绿色认证。同时，建立监督机制，确保已认证项目持续符合标准要求，推动整个区域山地旅游建筑向绿色、环保方向发展。

4. 推动技术创新合作，将重点聚焦于人工智能技术、机器人、无人机等前沿技术在山地旅游领域的应用研发。加强与科研机构、科技企业的合作，整合各方资源与专业优势，共同开展智慧技术在山地旅游领域的应用研究和实践探索，提升山地旅游的智能化发展水平和竞争力。

5. 积极推行山地景区无障碍建设实践，探索打造

亚太地区无障碍山地旅游目的地示范点，规划建设无障碍专用道、轮椅专用位、架空索道、高山电梯、轮椅升降平台等设施，切实解决老人、肢残人等特殊群体的旅游痛点，体现山地旅游的包容性和人文关怀。

3.2.4 文化遗产传承保护(5项举措)

1. 加强与国家、省级和地方文化领域机构的深度协作，整合各方资源与优势。以尊重和维护原住民权益为前提，鼓励原住民参与山地旅游业态的建设与发展，将当地文化特色和传统知识充分融入旅游项目的规划、设计与运营中，打造具有独特魅力和文化内涵的旅游体验，有力促进当地社区的经济发展和文化传承。

2. 积极与联合国教科文组织（UNESCO）、世界文化和遗产旅游协会（WTACH）等权威专业机构建立合作关系，探索开展亚太山地旅游文化遗产保护相关研究项目，聚焦文化遗产的现状评估、保护技术、可持续利用等关键领域。

3. 提倡相关政府部门完善文化遗产地的保护政策，充分考量亚太地区山地旅游的文化特点和发展需求，制定更加严格、细致且具有针对性的文化遗产保护法规和标准。积极整合国际层面的技术援助与政策资源，加强与联合国旅游组织（UN Tourism）、世界自然保护联盟（IUCN）、联合国粮食及农业组织（FAO）等国际组织的合作。借助国际组织的专业知识、技术和资金支持，提升文化遗产保护的能力和水平，推动政策有效实施。

4. 推广具有文化教育意义的体验式旅游，融合叙事传播与沉浸体验，通过现代科技手段和专业讲解，讲述文化遗产背后的故事和价值，增进游客对在地传统文化的认知，激发游客对文化遗产保护的关注和热情。

5. 开展全面系统的社区文化、自然历史资源调研工作，运用科学的方法和标准，识别具有文化魅力的旅游资源，包括传统技艺、本土手工艺、节庆活动及历史遗址等，对识别的旅游资源进行评估，制定针对性的保护和开发策略，充分挖掘其文化旅游价值潜力，实现文化遗产保护与可持续旅游发展的良性互动。

3.2.5 能力建设教育与研究(7项举措)

1. 开展亚太山地旅游从业者可持续实践专项培训项目，推动亚太山地旅游业可持续运营管理。

2. 聚焦亚太山地旅游业的热点、难点、趋势等问题，积极推动亚太地区的区域性联合研究，组织科研机构、高校和旅游企业等多方力量共同参与。

3. 探索搭建亚太山地旅游最佳实践数据库，广泛收集和整理亚太地区以及全球范围内山地旅游在规划、开发、运营、管理等方面的成功案例和实践经验，通过数据库平台，为旅游从业者、研究者和政策制定者提供便捷的信息查询和共享服务，促进山地旅游领域的知识传播和经验借鉴，推动行业整体水平的提升。

4. 构建社区级信息共享机制，建立完善的游客反馈数据收集、整理和分析系统，根据分析结果，针对性地改进旅游产品和服务，提升游客的体验质量，保障游客满意度，并通过积极互动维护社区旅游品牌声誉。

5. 探索打造国际山地旅游知识共享平台，加强全球山地旅游目的地之间的实践经验交流。例如，定期出版《亚太山地旅游》季刊或半年刊，邀请亚太地区知名的旅游专家、学者和从业者撰写文章，分享最新的研究成果、实践经验和创新理念。

6. 积极参与或制定亚太山地旅游业专项技能培训计划，涵盖导游服务、酒店管理、语言能力、商业运营、市场营销及生态保护等多个培训领域。通过系统的培训课程和实践项目，帮助旅游从业者提升专业技能和综合素质，增强其在旅游市场中的竞争力，为亚太山地旅游的高质量发展提供人才支持。

7. 依托专项教育计划，开展针对青年群体的山地旅游教育活动，增强青年群体对山地旅游的认知与山地生态保护意识，组织开展相关的志愿者活动、社会实践项目和创新竞赛，激发他们的行动意识和责任感，为应对山地旅游挑战、产业创新发展贡献青年力量。

3.2.6 政策与治理框架(8项举措)

1. 建立可持续山地旅游区域协作机制，充分发挥国际山地旅游联盟（IMTA）在山地旅游专业领域政策倡导与利益相关方协同方面的引领作用，促进亚太各国在山地旅游政策制定、资源共享、市场推广等方面的深度合作，形成区域旅游发展的强大合力，共同应对亚太山地旅游发展中的挑战。

2. 探索创造“亚太山地旅游”机制性主题活动，

整合区域旅游目的地资源并强化公众认知推广，提升亚太山地旅游在全球旅游市场的知名度和美誉度。

3. 相关政府及私营部门应加强与联合国旅游组织（UN Tourism）、国际山地旅游联盟（IMTA）、亚太旅游协会（PATA）、世界自然保护联盟（IUCN）、联合国粮食及农业组织（FAO）、全球可持续旅游委员会（GSTC）等国际权威机构的战略合作，建立常态化的沟通与合作机制，共同开展研究项目、制定行业标准、推广可持续旅游理念，借助各方资源和专业优势，提升亚太山地旅游的国际影响力和可持续发展水平。

4. 政府应推动完善负责任旅游投资的财政激励政策体系，综合运用税收优惠、财政补贴、低息贷款等多种政策工具，鼓励企业和投资者将资金投向具有生态保护、社会公益和文化传承价值的山地旅游项目。

5. 政府应推动旅游政策与国家级山地旅游目的地保护战略的整合，依托亚太旅游协会（PATA）的政策倡导与产业合作网络，为亚太山地旅游业政策融合提供有力支撑。加强旅游部门与环保、文化、农业等相关部门的沟通与协作，确保区域山地旅游发展与国家整体发展战略相协调，实现旅游资源的合理开发和有效保护。

6. 倡导相关国家及地区采纳 GSTC 全球可持续旅游标准等国际社会公认标准，将可持续发展理念贯穿于山地旅游规划、开发、运营的全过程。通过严格执行标准，使旅游活动对生态负面影响最小化，确保山地旅游目的地的原真性与代际可持续性，促进当地社区经济发展和民生福祉提升，并建立公平合理的利益分配机制，保障当地社区、企业和游客等各方利益。

7. 探索构建亚太山地旅游分级标准框架，全面考量各山地旅游目的地的独特生态特征、资源禀赋和发展水平。依据不同的标准等级，为各目的地量身定制发展指导策略和管理建议，使各目的地结合自身发展实际，定位个性化发展路径，实现可持续发展目标，提升当地旅游服务质量和市场竞争力。

8. 委托独立旅游专家团队开发亚太区域监测框架，运用科学的方法和先进的技术手段，系统追踪战略建议的实施进展。对亚太山地旅游的发展状况进行评估和分析，及时发现问题并提出改进措施，为政策制定和决策提供科学依据。

APPENDIX — REFERENCES AND BIBLIOGRAPHY

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