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Cover photograph: Landscape view of Meteora rock formation in Pindos mountain range (Greece)
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Mountain tourism– Towards a more sustainable path

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Foreword

Mountains offer an array of possibilities for tourists, offering a place to refresh, recharge and re-awake with the power of nature.

At the same time, sustainable tourism can serve as an important driver of socio-economic development in mountain areas. Well managed, community-based tourism increases and diversifies household incomes, enhances job and livelihood opportunities, supports traditional systems, builds resilience and helps to conserve and promote natural and cultural heritage across landscapes.

Tourism has proved to be a lifeline for many communities in mountain regions and can play a leading role in protecting these fragile ecosystems. As global tourism emerges from the cloud of the pandemic, we have a chance to rethink the sector and the benefits it delivers. In the longer term, this could open the way for new opportunities for mountains and their inhabitants. Travellers are increasingly looking at ways through which to reconnect – in a low-impact way – with nature, local traditions and cultures, and for experiences in open-air and less crowded destinations. This is particularly important in mountains, which are under pressure from the impacts of the climate crisis, natural disasters and biodiversity loss.

The mountain sector is also stepping up its climate action ambitions. At the United Nations Climate Change Conference (COP26) in Glasgow, the World Tourism Organization (UNWTO) and partners launched the Glasgow Declaration on Climate Action in Tourism, committing stakeholders to work towards net-zero by 2050.

This study, jointly developed by the Food and Agriculture Organization of the United Nations (FAO), the Mountain Partnership Secretariat and UNWTO, aims to support the role of tourism in the sustainable development of mountain regions. It presents projects and initiatives from around the world, detailing successes and challenges, and highlighting the key elements necessary to ensure that tourism development in mountains contributes to the 2030 Agenda and the Sustainable Development Goals (SDGs). The release of this report also marks International Mountain Day 2021, the theme of which is "Sustainable Mountain Tourism".

A recent Memorandum of Understanding between FAO and UNWTO emphasizes the crosscutting relevance of tourism and the importance of cooperation at all levels to fully engage local communities, maximize the benefits of the sector, and effectively manage its impacts on resources. This collaboration aims to nurture innovation and entrepreneurship, drive sustainable development and income diversification opportunities, and strengthen livelihoods through rural tourism, agritourism, nature tourism, outdoor activities and other forms of landscape-based tourism. It envisages, among others, collaborative activities within the framework of FAO's Globally Important Agricultural Heritage Systems (GIAHS), the Coalition of Fragile Ecosystems and the Green Cities Initiative.

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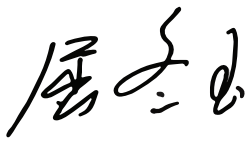
We are confident that this new study will contribute to identifying ways of accelerating recovery in mountain regions for the well-being of local people, who include some of the world's most fragile populations, and the conservation of mountain landscapes and their rich heritage.



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Abbreviations and acronyms

CBD	Convention on Biological Diversity
CBT	community-based tourism
CO_2	carbon dioxide
DMO	destination management organization
GHG	greenhouse gas
IT	information technology
ITF	International Transport Forum
IUCN	International Union for Conservation of Nature
NGO	non-governmental organization
OECD	Organisation for Economic Co-operation and Development
SDG	Sustainable Development Goal
UNEP	United Nations Environment Programme
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNWTO	World Tourism Organization
WMO	World Meteorological Organization

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Executive summary

Mountains are important tourism destinations worldwide and attract visitors for their scenic beauty, sports attractions and rich cultural heritage. Tourism represents a source of income and economic opportunities for remote rural mountain communities. It can also help to revitalize local traditions and food systems.

However, tourism is also associated with potentially negative impacts on ecosystems, such as pollution and biodiversity loss, as well as on the social and cultural fabric of mountain communities. Climate change is one of the greatest challenges in mountain destinations, with impacts that include a reduction in periods of snow cover and an increase in the risk of extreme weather events.

The fragility of the natural, social and cultural heritage that is inherent to mountain regions determines the competitiveness and quality of tourism initiatives offered in mountains. A sustainable approach to mountain tourism in all countries is therefore imperative, in order to promote long-term growth, while maintaining a balanced use of resources.

The COVID-19 pandemic has affected all levels of the tourism value chain, including both supply and demand. Its impacts are reshaping the tourism sector and redefining tourism products and services. The post-COVID-19 era may bring new opportunities to mountain areas, as demand grows for less crowded destinations and the need to reconnect with open spaces and nature increases. The increased digitalization associated with the COVID-19 crisis also provides an opportunity to attract remote workers and digital nomads, contributing to local development and helping to reverse population decline.

Specific challenges for tourism development in mountain areas include health and safety issues, as well as crisis management, since natural or man-made hazards such as floods, landslides, earthquakes and conflicts can interrupt access and services for months or years, destroy assets and put the life of tourists at risk.

In developing mountain tourism, it is critical to generate income diversification and revitalize products and services, with a shift from high-impact tourism products and activities to low-impact, climate-sensitive ones. New and innovative products can transform mountain areas into attractive tourist destinations, particularly for the shoulder season. Among the many possibilities are gastronomy tourism, community-based tourism, spiritual tourism, wellness tourism, rural tourism, agritourism and cultural tourism.

The case studies featured in this publication highlight solutions being implemented or tested in mountain regions around the world. Many have involved rethinking tourist initiatives or creating new opportunities, and all of them seek to bring tangible benefits to local communities, while helping to enhance the conservation of the unique mountain heritage.

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A religious monastery in India
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1

Introduction



1. Introduction

The peak of Shah Fooladi, Afghanistan
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With their broad diversity of species, ecosystems, and a multiplicity of communities and cultures, mountain regions have long held a fascination for visitors, especially those drawn by natural landscapes, adventure, outdoor activities, cooler summer temperatures and the unique features of the mountain cultural heritage, with a sense of spirituality reinforced by mountains' isolation and soaring heights. Mountain settings were the backdrop for some of the earliest forms of tourism, as in the case of the European Alps. Today there are few regions of the world where the special qualities of mountain landscapes are not recognized, helping to drive a wide range of mountain tourism activities – based on snow and winter sports; the diversity of local populations and traditional cultural practices; an abundance of natural and thermal springs; the sacred dimension attributed to many mountain sites and peaks; and biological and geological diversity, reflected in unique geological formations and plant communities, as well as emblematic animal species, such as moose, lamas, blue sheep, chamois, ibex, snow leopards and pandas. All these are attractions for tourists who increasingly appreciate open-air destinations and seek refuge and well-being away from their busy urban lifestyles.

Tourism is an important resource for many mountain economies, for example in regions where natural resource extraction is prohibitively expensive due to poor accessibility, as well as highly damaging to mountain ecosystems. In some of the most scenic mountain ranges, such as the North Cascades National Park in the northwest United States of America and Makalu Barun National Park in Nepal, this fine balance is well understood and the values offered by biodiversity, watersheds and recreation are clearly defined and protected. The COVID-19 pandemic has offered an opportunity to underscore the importance of developing sustainable mountain tourism, tapping into tourists' growing desire to spend time immersed in nature. Increasingly, mountain and rural

areas have been seen as a safe haven against the pandemic, in a new quest for settings that offer a healthy environment and high quality of life. This surge in demand creates new opportunities, but also reinforces existing challenges both for traditional and emerging mountain destinations.

Tourism has been recognized for its potential to contribute to the achievement of many of the 17 Sustainable Development Goals (SDGs), particularly in the areas of job creation, sustainable consumption and production, and the conservation of natural resources. The tourism sector is specifically mentioned in, and called upon to deliver on three of the SDGs:

1. **SDG 8,** on the promotion of "sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all" includes as Target 8.9: "By 2030, devise and implement policies to promote sustainable tourism that creates jobs and promotes local culture and products".

2. **SDG 12,** which aims to "ensure sustainable consumption and production patterns", lists Target 12.b as the objective to: "develop and implement tools to monitor sustainable development impacts for sustainable tourism which creates jobs, promotes local culture and products".

3. **SDG 14,** which sets out to "conserve and sustainably use the oceans, seas and marine resources for sustainable development", includes as Target 14.7: "by 2030 increase the economic benefits of small island development states and least developed countries from the sustainable use of marine resources, including through sustainable management of fisheries, aquaculture and tourism".[1]

Due to its cross-cutting nature and impact, tourism can make an important contribution to the achievement of the SDGs in mountain regions, namely:

- **SDG 11 – Make cities and human settlements inclusive, safe, resilient and sustainable.** The role of tourism in the diversification of mountain economies can contribute to the economic resilience of local communities, particularly those dependent on agriculture. Tourism can also contribute to the inclusiveness and sustainability of mountain settlements by supporting the conservation of natural resources or providing jobs for segments of the population, such as youth and women.

- **SDG 15 – Life on Land.** Since natural ecosystems and biodiversity, including mountains, rivers and lakes, are prime tourism assets, the sector offers considerable opportunities for their conservation, if managed in a sustainable manner. Destinations are increasingly aware of the mutually beneficial relationship between the conservation of natural ecosystems and tourism revenues. Assessments of the economic value of natural assets can help to make a case for investment in sustainable tourism.

- **SDG 17 – Revitalize the Global Partnership for Sustainable Development.** One example is the Revitalizing Remote and Mountainous areas through Sustainable Alternative Tourism project (RAMSAT), part of the European Union Programme Interreg Europe.

[1] For further information, see www.e-unwto.org/doi/pdf/10.18111/9789284417254.

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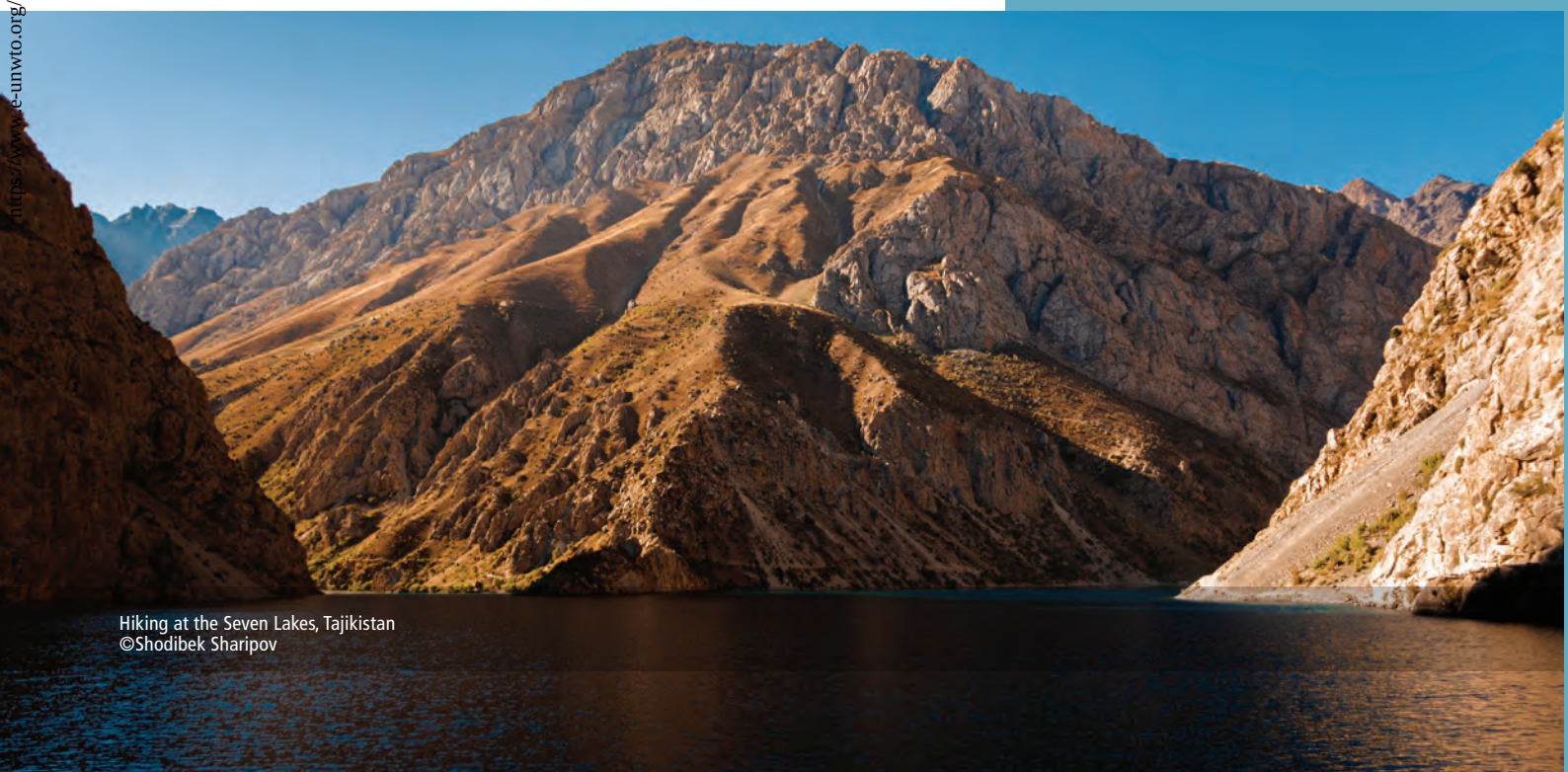
Accelerating climate action (SDG 13) in tourism is of the utmost importance for the resilience of the tourism sector, which is highly vulnerable to climate change, while at the same time contributing to greenhouse gas emissions. Climate action is understood as the efforts to measure and reduce emissions and strengthen adaptive capacity to climate induced impacts. In this regard, the Glasgow Declaration on Climate Action in Tourism, officially launched at the COP26 UN Climate Change Conference, aims to act as a catalyst for increased urgency about the need to accelerate climate action in tourism and to secure strong actions and commitment. The signatories of the Declaration have committed to act now to cut global tourism emissions by at least a half over the next decade and to reach Net-Zero emissions as soon as possible before 2050. Their actions are aligned with the five pathways defined in the Declaration: measure, decarbonize, regenerate, collaborate, finance.

Despite the damage caused to tourism by the COVID-19 pandemic – international tourist numbers declined by 73 percent in 2020 – the sector is one of the world's principal economic activities and a strong agent of global and local development. Realizing the potential of tourism to achieve the SDGs in mountains requires adequate sustainable tourism policies, coordination of relevant sectoral policies, innovation in tourism products, sustainable mobility and tools for impact measurement.

However, the competitiveness and quality of mountain tourism is closely linked to the fragility of the natural, social and human heritage and to the dynamism of the economy. A sustainable approach to mountain tourism in all countries is therefore imperative to promote long-term growth, while maintaining a balanced use of resources.

This publication presents an overview of some important trends in the mountain tourism sector that were emerging before the COVID-19 pandemic, and are likely to continue afterwards. It is aimed at the international mountain community and at public and private tourism actors. It is hoped that readers will find useful references for tourism product development in mountain areas and inspiration from the case studies, so as to make full use of the opportunities offered by tourism for the benefit of mountain people and ecosystems.



Hiking at the Seven Lakes, Tajikistan
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Tourists hiking in the Indian Himalayan Region
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2

Mountain tourism around the world



2. Mountain tourism around the world

Biker in Hampi, Karnataka, India
©Alka Jha/Unsplash

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According to UNWTO, mountain tourism is a type of "tourism activity which takes place in a defined and limited geographical space such as hills or mountains with distinctive characteristics and attributes that are inherent to a specific landscape, topography, climate, biodiversity (flora and fauna) and local community. It encompasses a broad range of activities related to the need to be in open air spaces and connect to nature in leisure time".[2]

Mountain ranges worldwide offer possibilities for a wide variety of tourism activities, of which some are more developed than others:

- **Winter and sports tourism.** Generally limited to more elevated mountain areas and concentrated in the snow seasons, activities include cross-country, alpine and glacier skiing, heli-skiing, snowboarding, sledding, snowshoeing and tobogganing.

- **Walking tourism.** This allows visitors to experience mountain landscapes, flora and fauna, as well as local cultural heritage. If properly planned and developed, it can bring a variety of economic and social benefits to residents and communities, particularly as a source of summer income in areas that are generally dependent on snow-based activities.[3] Given increasing consumer demand for 'experiencing' a location in an authentic way, coupled with the growing popularity of active tourism, walking tourism has the potential to showcase a destination as a whole, including its local culture and nature, as indicated by UNWTO (2019a).

- **Adventure and sports activities** can be carried out in mountain areas during and outside the snow season. They depend on weather conditions

[2] Source: www.unwto.org/mountain-tourism
[3] For example, since 2018, a network of municipalities and associations in the mountain area of the Calabrian Apennines Reveßntino-Mancuso (Italy) has created the Festival of Erranze and Filoxenia, based on events such ßas guided walking tours and designed to introduce visitors to local landscapes, nature and culture.

and site access. Such activities include mountain biking, zip-lining, quad biking, horse-riding, rock climbing, ice climbing, paragliding, zorbing and caving. They also include freshwater-based adventure and sports activities, such as river and lake tours, canoeing, sailing, windsurfing, paddle-surf, kite surfing, kayaking, rafting and freshwater fishing.

The following are among the most popular products for diversifying demand beyond the winter/snow season:

- **Rural tourism**. According to UNWTO, rural tourism is a "type of tourism activity in which the visitor's experience is related to a wide range of products generally linked to nature-based activities, agriculture, rural lifestyle/culture, angling and sightseeing" (UNWTO, 2019b). Mountains are a perfect setting for rural tourism, as activities take place in areas with a low population density; they have scenic landscapes and land use dominated by agriculture and forestry, and are dominated by traditional social structures and lifestyles. Depending on the host communities, time of year, and the interests of the visitor, shared activities may include agriculture, handicrafts, culinary activities/sampling typical foods, learning about medicinal and native plants, planting, harvesting, making cheese, handling animals and other activities related to daily life in rural communities, including traditional ceremonies, dancing and festivals.

- **Natural and cultural heritage** represents the backbone of the mountain tourism experience. Initiatives that promote this important sector include mountain film and literary festivals, exhibitions, rituals, events dedicated to food and agricultural products, as well as guided tours and forest bathing. This latter activity, known as *shinrin-yoku* in Japan, where it originated, is becoming increasingly popular worldwide, and involves immersing oneself in the forest and soaking in the atmosphere through the senses (Qing Li, 2018).

- **Spiritual tourism** is a growing segment of cultural tourism. According to UNWTO, "spiritual tourism is based on a variety of motivations, ranging from traditional religious tourism to alternative medicine to forms of deep immersion in nature" (UNWTO, 2019b). Activities include religious pilgrimages, visiting sacred sites, travel for worship and religious missions, and visits to natural environments such as forests, lakes, gardens, bird and animal parks, botanical gardens, caves and rocks for spiritual reasons. Mountains are often pilgrimage destinations or places for alternative medicine, especially in developing countries.

- **Wellness tourism**, as defined by UNWTO is "a type of tourism activity which aims to improve and balance all of the main domains of human life including physical, mental, emotional, occupational, intellectual and spiritual" (UNWTO, 2019b). The primary motivation for the wellness tourist is to engage in preventive, proactive, lifestyle-enhancing activities such as fitness, healthy eating, relaxation, pampering and healing treatments. Mountains and their connection with nature and spirituality set the scene for the development of experiences connected with wellness programmes.

In mountain regions, changes in temperature, humidity, heat and daylight hours are linked to changes in latitude and altitude, all of which influence ecosystems, human societies, and in turn, tourism attractiveness.

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Altitude is an important factor in relation to certain tourist activities such as trekking, climbing, adventure, sports and expeditions. Colder climates strongly influence mountain ecosystems, and different altitudes are associated with different mountain ecosystems. Due to the less hospitable terrain and climate, high mountains are generally less suitable for agriculture and more suitable for forest utilization and recreational activities, such as skiing and mountaineering. During the past 60 years, mountain climbers have embarked on a race to climb the world's highest peaks. One of the most popular events is the Seven Summits challenge, which involves climbing the highest mountains of each of the seven continents.[4]

The elevation at which a habitat changes varies on a planetary scale, particularly by latitude, affecting the tourism activities that can be experienced in mountain areas. For example, the lower limit of montane rainforests in mountains is generally between 1 500 and 2 500 m, while the upper limit is usually from 2 400 to 3 300 m, depending on the latitude.

Mountain tourist destinations by region

Mountains cover about 27 percent of the world's land surface, ranging over every continent and all major types of ecosystems, from deserts and tropical forests to polar icecaps.[5] The development of tourism in the various regions and destinations is heterogeneous. The availability of data on the sector in mountain areas is generally scarce, which poses many challenges in benchmarking destinations and opens opportunities for further research on tourism development, demand and impact in mountain regions.

Asia-Pacific

Asia contains the highest peaks in the world. The Hindu Kush Himalayan region is known as the Third Pole due to its masses of ice and snow and encompasses mountain ranges in Afghanistan, Bangladesh, Bhutan, China, India, Myanmar, Nepal and Pakistan. **Central Asia's** mountains extend across Kazakhstan, the Kyrgyz Republic, the Republic of Tajikistan, Turkmenistan and the Republic of Uzbekistan, where the majority of mountain communities make a living from agriculture, including pastoralism and forestry.[6] Mountains in **Southeast Asia** and **the Pacific** are particularly rich in biodiversity. Indonesia and the Pacific Islands are recognized for the presence of many active volcanoes that attract large numbers of visitors each year.

Principal mountain chains and tourist destinations

Altay Mountains (Mongolia); Hindu-Kush Himalayan Mountains (Afghanistan, Bangladesh, Bhutan, China - Tibet Autonomous Region, India, Nepal, Myanmar, Pakistan), Tian Shan (China), Zagros Mountains (Iran).

[4] Everest (Asia), Aconcagua (South America), Denali (North America), Kilimanjaro (Africa), Elbrus (Europe), Mount Vinson (Antarctica), Puncak Jaya /Carstensz Pyramid (Australasia).

[5] The definition indicates six elevation classes according to the following scheme:· Class 1: elevation ≥ 4 500 m; · Class 2: elevation 3 500–4 500 m; · Class 3: elevation 2 500–3 500 m; · Class 4: elevation 1 500–2 500 m and slope ≥ 2°; · Class 5: elevation 1 000–1 500 m and slope ≥ 5° or LER > 300 m; · Class 6: elevation 300–1 000 m and LER > 300 m (Kapos, Rhind, Edwards and Ravilious, 2000).

[6] Kazakhstan, the Kyrgyz Republic, the Republic of Tajikistan, Turkmenistan and the Republic of Uzbekistan, in the UNWTO regional structure are part of Europe.

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Example of a mountain tourism destination

Spiritual tourists in Viet Nam account for a large volume of visitors. Among the 32.5 million domestic tourists in 2012 (the latest figures available), the number of those who only visited spiritual places – such as pagodas, temples, palaces and churches – was about 13.5 million (41.5 percent). Among the most popular venues is the Ba Den Mountain Tourism Complex, which received 2.2 million visitors that year. Due to historical and geographical features, most of the historical-spiritual heritage elements of the Ninh Binh province are closely connected to hills and mountains (UNWTO, 2013).

Europe

The Alps are among the most frequently visited mountain regions in Europe. The total volume of tourists in the Alpine regions of Europe cannot be accurately measured, mainly due to national differences in the definition of tourist accommodation, but an estimate is that an average of 120 million people visited the region annually before the COVID-19 pandemic (M. Notarianni, personal communication, 2021). The Alps have more than 600 ski resorts and 10 000 ski-lifts, with 85 percent of alpine skiing concentrated in France, Switzerland, Austria and Italy. The Rhone-Alps region in France recorded 51.5 million total overnight stays in 2019 (Eurostat, 2021). In Slovenia, in 2019, the highest number of overnight stays was recorded in mountain resorts – around 4.6 million (Statistical Office of the Republic of Slovenia, 2020). Other important European mountain ranges include the Pyrenees (Spain, France and Andorra), the Dinaric Arc (along all the western Balkan countries), and the Caucasus Mountains spanning Europe and Asia (Armenia, Azerbaijan, Georgia, Iran, the Russian Federation and Turkey).

Principal mountain chains and tourist destinations

European Alps (Central Europe), Caucasus Mountains, Dinaric Arc, Kjolen Mountain (Norway), Pyrenees Taurus Mountains (Turkey), Ural Mountains (the Russian Federation).

Example of a mountain tourism destination

Zermatt is one of Europe's best known mountain resorts. Located in Switzerland, it commands an iconic position at the foot of the mighty Matterhorn, an ever-present snowy pyramid on the skyline. Between November 2018 and October 2019 the Zermatt-Matterhorn destination, in Switzerland, attracted 2.3 million overnight bookings (M. Notarianni, personal communication, 2021).

Middle East and North Africa

Although this region is not renowned for mountain tourism, it has some destinations that come under this category, such as the Atlas Mountains in Morocco and Mount Sinai in Egypt.

Principal mountain chains and tourist destinations

Atlas Mountains (Morocco, Algeria), Wadi Shab and Wadi Bani (Oman), Jebel al-Madhbah (Jordan), Mount Sinai (Egypt), Mount Hermon (Lebanon).

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Example of a mountain tourism destination

The National Park of Toubkal is located in the High Atlas Mountains of Morocco. It contains the Toubkal massif, with the highest peaks of North Africa (Jbel Toubkal has an altitude of 4 165 m) in the central part of the High Atlas. Created in 1942, the National Park of Toubkal was the first in Morocco, created to conserve high-altitude ecosystems, including the endemic fauna and flora of this region. Over the decades, the park has become a popular destination for foreign tourists, and more recently, for Moroccans themselves. There are no precise figures for numbers, but it is estimated that the park receives about 40 000 visitors per year (M. Notarianni, personal communication, 2021).

North and Central America and the Caribbean

Principal mountain chains and tourist destinations

Alaska Range (United States of America), Appalachian Mountains (United States of America), Brooks Range (United States of America), Coastal Mountains (United States of America, Canada), Rocky Mountains (United States of America, Canada), Sierra Madre (Mexico).

Example of a mountain tourism destination

According to the US National Parks System, the Rocky Mountain National Park received 4.7 million visitors in 2019, though the figure fell to approximately 3.3 million in 2020 due to the COVID-19 pandemic. Hiking, camping, mountaineering, fishing, hunting, mountain biking, skiing and snowboarding are the main tourist activities in the park.

South America

Principal mountain chains and tourism destinations

Andes (Argentina, Bolivia, Chile, Colombia, Ecuador and Peru).

Example of mountain tourism destination

Machu Picchu is the site of an ancient Inca city, high in the Andes of Peru. Located at 2 430 m in the Eastern Cordillera of southern Peru, Machu Picchu is known as the Lost City of the Incas. It is one of the world's most famous archaeological sites and is both a cultural and natural UNESCO World Heritage Site and National Park. According to the Peruvian Authorities, fewer than 80 000 tourists visited Machu Picchu in 1991, but by 2018, this number was more than 1.5 million – a 20-fold increase.

Sub-Saharan Africa

Principal mountain chains and tourism destinations

Crystal Mountains (Gabon, Congo, Zambia, Angola), Drakensberg Mountains (South Africa), Mitumba Mountains (Zambia).

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Example of mountain tourism destination

At 5 895 m, Mount Kilimanjaro is the highest mountain in Africa and the highest free-standing mountain in the world. Part of Kilimanjaro National Park, around 50 000 tourists climb its slopes each year, according to the Tanzanian authorities.

Trends in key mountain regions and destinations

Since the beginning of 2020, the COVID-19 pandemic has affected all levels of the tourism value chain, including both supply and demand. Supply-side impacts are clear, with large and small businesses facing severe economic hardship. The economic, psychological and emotional repercussions of the COVID-19 pandemic on tourism demand are still emerging and are likely to continue at least until the pandemic is over (Bratic *et al*., 2021; Jaffar *et al*., 2021).



Skiier in Kaunertaler Gletscher, Austria
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Yet the crisis has also emerged as an opportunity to concentrate on issues of resilience, sustainability and connection between stakeholders. The One Planet Sustainable Tourism Programme report (2020) highlights six lines of action to support a responsible recovery and build better tourism: 1) public health, 2) social inclusion, 3) biodiversity conservation, 4) climate action, 5) a circular economy, and 6) governance and finance. According to the report, an increasing number of consumers are demanding that the tourism sector take responsibility for its carbon dioxide (CO_2) emissions and there is growing demand for experiences in nature (biodiversity conservation). To be well positioned for long-term recovery and meet the needs of this new demand, destinations, governments and businesses must provide answers to a key question: what will the future of demand for tourism – and in this case for mountain tourism – look like?

Key points to emerge from the report include the following:

- Tourism is refocusing on leisure rather than business.[7] Mountain tourism is based mainly on leisure tourism.

- Consumer preferences are shifting to less crowded tourist destinations, and in particular to rural, nature-based locations. This could positively affect mountain destinations.

- COVID-19 has changed tourists' priorities, values and behaviour, and travelling as safely and healthily as possible is now a high priority. Consumers' awareness of the environmental and social impacts of their travel choices is greater, building on a trend that had started before the pandemic.

- These preferences can be accommodated by responsible and more sustainable tourism, while leading to a wider territorial distribution of tourists.

- The COVID-19 crisis provides an opportunity for rural and remote destinations (including mountain destinations) to attract remote workers and digital nomads for a longer period of time, contributing to local development and helping to reverse population decline.[8]

Due to travel restrictions imposed by countries during the COVID-19 pandemic, demand has been increasingly oriented towards domestic and proximity tourism, with a preference for natural areas and rural environments, offering authentic and regenerative experiences. If well managed, these choices can represent opportunities for mountain regions. Within the leisure sector, the following segments are likely to be positively affected by the pandemic (Accenture, 2021):

- **Nature-based tourism** – Mountains are ideal destinations for those who seek solace and respite from city life and the COVID 19 pandemic.

[7] A leisure trip refers to the purpose and motive of a visit. Trips (visits) for leisure, recreation and holiday purposes outside the usual environment are mainly undertaken for relaxation.

[8] Since the beginning of the COVID-19 pandemic, the booming digital nomad movement has involved many mountain destinations. One example is The Mountain Coworking Alliance, a collective of independent co-working spaces in mountain towns around the world.

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- **Health and well-being** – According to the Global Wellness study (2021), the 'integrated wellness' market is expected to grow by USD 1.3 trillion by 2024. This could offer valuable opportunities for tourism in mountain areas.

- **Living local** – The pandemic is proving an opportunity to rethink products and services. Staycations[9] and domestic travel are likely to be priorities for many leisure tourists, certainly in the short term. Many small towns and villages are reviving their heritage through various forms of innovative tourism, such as Italy's successful model of the *Albergo Diffuso*.[10]

- **Doing good** – Visitors in the post-COVID era are looking for experiences that combine their wellness with that of the planet. However, they often lack the information needed to travel in a more sustainable way. When properly planned, managed and communicated, mountain tourism can offer an opportunity to meet tourists' desire to contribute to sustainability.

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[9] A holiday spent in one's home country rather than abroad, or one spent at home and involving day trips to local attractions.

[10] The *Albergo Diffuso*, an innovative concept of hospitality, was launched in Italy in the early 1980s as a means of reviving small, historic Italian villages and town centres off the usual tourist track. Translated into English as 'scattered hotel', it consists of a hotel that is not in a single block, but is converted out of various historic buildings in a small community.



Bashqar valley in Northern Pakistan
©Shams Uddin

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3

Challenges for tourism in mountains and emerging issues

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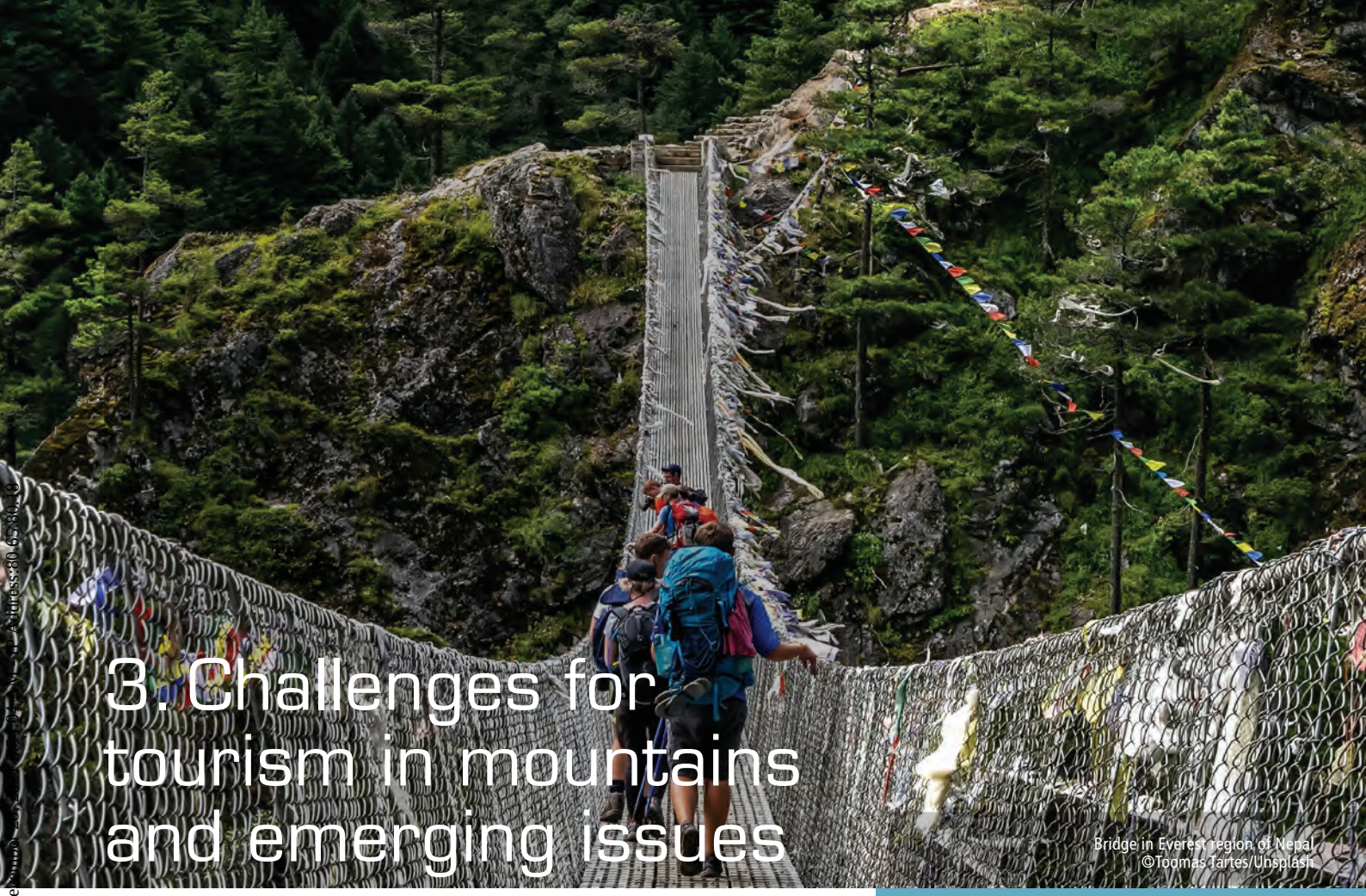

3. Challenges for tourism in mountains and emerging issues

Bridge in Everest region of Nepal
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The lack of reliable tourism data and indicators in most mountain destinations worldwide significantly challenges the monitoring and evaluation of the positive and negative impacts of tourism activities, especially in developing countries.

Mountain ecosystems include a wide range of small and unique habitats, with sometimes very short growing and breeding seasons for fauna and flora, and can be particularly sensitive to alterations produced by human activity. Mountain landscapes can change abruptly for a variety of reasons: avalanches, landslides, earthquakes, floods, rockfalls, deforestation, lava flows and drought.

Tourism activities often involve the development and intensive use of trails, as well as sports tracks made by vehicles, loss of landscape due to the construction of tourist facilities (sometimes illegal), and motorized and non-motorized transport.

Generally, the presence of visitors is concentrated in small areas, contributing to increased noise pollution and waste production. The practice of mountain sports, involving both athletes and pack animals, invades natural spaces, meadows and marshes, causing serious environmental problems associated with water pollution, the accumulation of waste, soil compaction in camping areas and the impact on fauna, often with severe repercussions for fragile and sensitive ecosystems (Barros and Pickering, 2015). For example, studies in both the Himalayas and the Andes show the effects of tents and improvised tourist toilets on water sources and the soil (Hock *et al.*, 2019).

Other environmental impacts of tourism may include land clearance, wildlife relocation and the introduction of exotic and invasive species and diseases.

Winter tourism, ski resorts and destinations with artificial snow have the highest impact on mountain environments. In particular, such activities can lead to: a) an impact on the landscape due to ski runs, ski-lifts and construction works for snowmaking; b) large consumption of water; c) massive and increasing energy consumption; d) increased soil erosion (additional flow of surface runoff in spring); e) disturbance of fauna and damage to flora; f) traffic congestion; and f) indirect damage related to construction works and services for tourists, as well as building speculation, for example, the construction of second homes (CAI, 2010).

Pollution[11]

Concentrated visitor activity in mountain areas generates significant amounts of both solid waste and wastewater, which can pollute groundwater, streams, lakes and soil through improper storage and disposal. Solid waste can, for instance, build up from food and beverage consumption and the disposal of used packaging, supplies and equipment. Certain types of waste, including pharmaceuticals, batteries, personal and cleaning products, may in addition contain dangerous chemicals that can harm local ecosystems, wildlife and people. Emissions from the use of motorized transport, such as snowmobiles, contribute to climate change and pollute clean mountain air. Wastewater and sewage from facilities, watercraft and large numbers of pack animals can also pollute freshwater resources, particularly since human and other waste and chemicals break down more slowly in alpine areas. (Charters and Saxon, 2007).

The volume and composition of waste generated is often determined by the activities and practices of businesses in the tourist industry, as well as the behaviour of tourists themselves. As a result, even very remote areas are faced with higher amounts of waste, such as plastics, metals and other non-biodegradables, which did not reach those areas before. Particularly in developing countries, adequate practices and waste management systems (such as environmentally sound management) to cope with the issue have yet to be developed and implemented (Crawford, Mathur and Gerritsen, 2017). Lack of formal institutional systems for waste management, especially in remote areas, often leads to informal methods of disposal, which are harmful to human and environmental health, for example causing water pollution. In addition, mountain tour operations can consume considerable amounts of natural resources and energy, putting additional pressure on mountain ecosystems (Alfthan *et al*., 2016; UNEP, 2007).

Of all waste sources, plastic is one of the most severe environmental problems on a global scale and poses challenges to the conservation of biodiversity and healthy ecosystems. The urgency of tackling rapidly increasing levels of (plastic) litter and microplastics is acknowledged and has recently garnered attention at a global scale (UNEP Resolution 4/6: Marine plastic litter and microplastics. UNEP/EA.4/Res.6., 2019). In 2019, the Conference of Parties to the Basel Convention adopted decision BC-14/12, by which it amended

[11] The section on pollution is a contribution by United Nations Environment Programme (UNEP) /Secretariat of the Basel, Rotterdam and Stockholm Conventions (BRS) / GRID-Arendal.

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Annexes II, VIII and IX to the Convention in relation to plastic waste. This makes the Basel Convention the only global legally-binding instrument specifically addressing plastic waste. The currently negotiated Post-2020 Global Biodiversity Framework of the Convention on Biological Diversity (CBD) further calls for action to reduce pollution to levels that are not harmful to biodiversity, ecosystem functions and human health (CBD First Draft of the Post-2020 Global Biodiversity Framework, CBD/WG2020/3/3, 2021).

Plastic waste in mountain areas

Two recent works, the *Global mountain waste survey* (2021) and the forthcoming *Assessment on plastic waste in remote and mountainous areas,*[12] address and investigate the linkages between tourism and plastic waste in mountains. Preliminary findings from the draft assessment report, prepared by the Secretariat of the Basel, Rotterdam and Stockholm Conventions, highlight that mountain ecosystems are among those strongly affected by plastic waste. Tourism is a key driver increasing the pollution problem in mountain regions worldwide.

Data suggest that higher levels of economic development are linked to higher per capita plastic waste generation. These global findings also apply to mountain regions (Secretariat of the Basel, Rotterdam and Stockholm Conventions, draft, forthcoming; Alfthan *et al*., 2016). Globally, mountain areas tend to have relatively low levels of economic development, correlated to lower per capita plastic waste generation, which increases with a rise in tourism, as further discussed below. In addition to local impacts, studies have shown that mountain areas are also deposits of plastic waste in the form of microplastics originating from other regions. Microplastics travel long distances through the atmosphere and end up in significant quantities in mountain areas, far from their point of generation. So-called 'plastic rain' has been reported in the Alps, Pyrenees and Rocky Mountains (Hutt, 2019; Leahy, 2019; Martynenko, 2019), and microplastics have been found in glacier surface snow near the Tibetan Plateau (Zhang *et al*., 2020). Plastic waste often contains persistent organic pollutants used as additives, which are used in products for packaging to clothing and other mountain equipment (Secretariat of the Basel, Rotterdam and Stockholm Conventions, draft, forthcoming).

Tourism and plastics

The tourism sector is a significant contributor to the problem of plastic pollution, as much of the plastic used in tourism operations is made to be thrown away and often cannot be recycled. The issue is exacerbated by the littering of plastic products in pristine environments where tourism takes place, thereby causing significant harm to the health of animal species, humans and ecosystems (UNEP and WTTC, 2021). At the same time, the tourism sector is directly impacted by plastic pollution, as it leads to degradation of the quality and health of destinations' ecosystems.

Eliminating single-use plastic products across the tourism industry represents an opportunity to tackle plastic pollution at the source and enhance the

[12] The forthcoming report is being compiled in the context of the project 'Plastic Waste in Remote and Mountainous Areas', funded by France and Norway; implemented by the Secretariat of the Basel, Rotterdam and Stockholm Conventions in cooperation with Grid-Arendal.

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contribution of tourism to the protection of ecosystems, thereby preserving the attractiveness of destinations. Single-use plastics are usually unnecessary, and can be eliminated without compromising the tourist experience (WWF, 2019a; WWF, 2019b). In addition, addressing problematic plastics across the tourism value chain can lead to a shift towards innovative and circular business models, which can result in added value and support a sustainable recovery from COVID-19. (One Planet Sustainable Tourism Programme, 2020; World Bank, 2021).

Packaging is a key source of plastic waste in mountain areas. To a large extent, pollution by packaging is driven by tourism generating disproportionate amounts of single-use and non-recyclable plastics. Consequently, the waste in mountain areas with significant mountaineering tourism tends to be primarily plastic, as can be seen for example in the Pamir Mountains, which are largely located in Central Asia, in Tajikistan (Taylor, 2019). Moreover, tourists tend to generate higher amounts of plastic waste per capita compared with the local population. The significant contribution of tourism to increased plastic waste generation can be observed both in high-income countries and in middle/lower-income countries. Research conducted in the Carpathians suggests a strong correlation between the growing number of tourists and the increased volume of municipal solid waste, including plastic waste (Przydatek and Ciągło, 2020). Popular mountain tourist destinations, such as the Himalaya summits (ICIMOD, 2019) and Kilimanjaro (Kaseva and Moirana, 2009) have thus become plastic waste hotspots (Secretariat of the Basel, Rotterdam and Stockholm Conventions, draft, forthcoming). In addition, tourism-related sectors, such as the construction of cable cars and outdoor sports, often generate even more bulky waste, which is difficult to dispose of due to the long distances to dump sites. Another example is the outdoor clothing sector, which often uses chemicals and hazardous additives in its products (Greenpeace, 2016). Various companies have taken, or are taking steps to reduce or eliminate critical substances in their production, though much work remains to be done.

The global COVID-19 pandemic has strongly impacted the tourism sector worldwide, and economic lockdowns and global travel restrictions have temporarily reduced waste and pollution in many destinations. However, this positive effect may be counterweighted by an increased adoption of single-use plastics, chemicals and medical/cleaning equipment, which is often used as a means of demonstrating that tour operators take care of safety and cleanliness for their clients (Global Tourism Plastics Initiative, 2020; World Bank, 2021). Cleaning and sanitization measures should take environmental, health and safety risks of the products and applied procedures into consideration (Global Tourism Plastics Initiative, 2020).

Limited management infrastructure

The collection and separation of plastic waste is particularly challenging for mountain areas in less developed countries, resulting in low collection rates (Agovino and Musella, 2020). Similarly, functioning transport and separation systems, sanitary landfills, and recycling capacities are often not in place. These challenges result in increased rates of dumping, including illegal dumping, and open burning of plastic waste in mountain areas. One prominent example is the growing amount of plastic waste (mainly food packaging) openly dumped

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in the Himalayas (Marsh and Shalvey, 2018). However, some progress is being made in certain areas. For example, in the Kilimanjaro National Park, a 'trash-in-trash-out' system has resulted in an improved solid waste collection rate, from 64 percent in 2003 to 94 percent in 2006 (Kaseva and Moirana, 2009).

Climate change

According to research by UNWTO and the International Transport Forum (ITF) released in December 2019, the tourism sector is predicted to increase its CO_2 emissions by at least 25 percent by 2030 (UNWTO and ITF, 2019). While the COVID-19 pandemic has led to a 7 percent reduction of greenhouse gas (GHG) emissions globally, it is expected that emissions from tourism could rapidly rebound as operations restart, so the need to align tourism operations with climate action continues to be of the utmost importance if the sector is to respect international goals (UNWTO, 2021). Due to global warming, mountain ranges such as the Himalayas, Alps, Rocky Mountains and southern Andes, and isolated peaks such as Kilimanjaro in Africa, are showing signs of severe glacial loss.

According to UNWTO, UNEP and the World Meteorological Organization (WMO), the impacts of climate change that will affect the sustainability, competitiveness and development of tourism destinations include:

- Changes in the length and quality of climate-dependent tourism seasons can have significant implications for competitiveness between destinations.

- Climate-related environmental changes (water availability, loss of biodiversity, landscape degradation), increased natural hazards, infrastructure damage, and increased incidence of vector-borne diseases will impact tourism to varying degrees. Climate change is likely to trigger the rates and intensity of natural hazards such as landslides, avalanches, flooding, and river discharge, with dramatic consequences for tourist destinations.

- Climate change mitigation policies aimed at reducing GHG emissions may impact tourism mobility, leading to increased transport costs, and encourage changes in the travel patterns of tourists.

- Climate change-related economic and political instability is expected to intensify in some countries, leading to changes in travel choices of tourists, particularly international visitors.

In Nepal, the Government and the Action on Climate Today team jointly conducted an economic impact assessment of climate change on tourism. The assessment revealed that the economic cost of loss and damage in the sector was equivalent to an annual average of 2–3 percent of total gross domestic product between 1971 and 2015. With increasing impacts, this loss and damage will be even more significant.

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Sociocultural impacts

Populations living in mountain areas can be highly sensitive to impacts and changes due to tourism activities. Negative impacts linked to tourism include issues of cultural authenticity and disruption of local communities. Some of the most serious negative impacts of tourism development in mountain areas include indigenous peoples dispossessed of their lands, communities exchanging their ancestral customs for the 'modern' ones of visitors, changes in values and lifestyles, loss of identity, and religious sites not respected by visitors. On the other hand, tourists come to mountains to experience "the old ways of life" and the preservation of these might be in conflict with local people aspirations for modernization, especially for the younger generations. With the advances of digitalization and the influx of tourists, the trade-offs between maintaining traditions and economic development might become even more frequent. The negative social impacts of poorly managed tourism can also include reduced availability of scarce shared resources such as fuelwood, fish and freshwater. Rural or traditional and indigenous communities may not want to share their culture with tourists, or recognize the interest that tourists may have in their way of life, but it is difficult for such communities to isolate themselves from visitors and the impacts of outside cultures.

Economic aspects

In mountain areas, the most obvious economic issues are related to seasonality, leakages, the creation of stable and decent work, inclusiveness in the distribution of economic benefits among communities and destinations, competitiveness of tourism businesses, and tourism as a means to reduce poverty and contribute to biodiversity conservation.

Seasonality: In general, there are few mountain destinations that have constant tourism throughout the year. The latitude, climatic conditions, presence of ski-lifts and infrastructures for winter sports influence the seasonality of the sector: in destinations with ski-lifts and facilities for winter sports there are two tourist seasons: the winter season (that generally begins with the arrival of the first snow and ends with the arrival of spring) and the summer season, which in the northern hemisphere begins approximately with the Easter holidays and ends at the beginning of autumn. This is the case of the European Alps and the Rocky Mountains in the United States of America, among others. Other mountain destinations may be influenced by extreme winter conditions, where it is almost impossible to conduct any activity above 3 000 m. Cases in point include the Hindu Kush Himalayas and The Central Northern Andes in Latin America.

Leakage: In the tourism industry, leakage "takes place when revenues from its economic activities are not available for reinvestment or consumption of goods and services within the same destination" (Jönsson, 2015), typically when tourism companies are foreign-owned and/or are based in another country. Tourism economic leakage is particularly evident in developing countries, and especially in many mountain destinations.[13] Revenues leak out of local economies when working conditions are poor, employment is seasonal and short-term, and there is insufficient investment in skill-building or capacity

[13] Some studies (UNEP) have revealed leakages as high as 85 percent for the African Least Developed Countries, 80 percent in the Caribbean, 70 percent in Thailand, and 40 percent in India.

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development of local people.

However, well-managed tourism can improve infrastructure, enhance the local value chain, provide community services and help to diversify local economies, with positive impacts on the self-sufficiency and economic sustainability of mountain communities.

Health and safety: Addressing health and safety issues is a precondition for sustainable tourism development, particularly given the sensitivity of international travellers to both real and perceived health and safety risks. Indeed, the management of health and safety issues in tourism affects travellers, the industry and the local community.

Physical and environmental changes can create stress on visitors, particularly international travel in mountain areas. Examples include changes in air and water quality and exposure to changes in altitude, humidity, temperature and time zones.

Risks associated with travel are influenced by destination, length of stay, nature of activities undertaken, standards of accommodation and food hygiene, and traveller behaviour, along with health status, gender, age and experience. The most common problems are accidents, food poisoning and diarrhoea, sunstroke, asthma, fatigue, heart problems, and in high mountains, cases of hypothermia and acute mountain sickness. Deaths due to natural disasters, such as avalanches, flooding and earthquakes, are not uncommon. In destinations where accommodation, tourism facilities and infrastructures, hygiene, sanitation and medical care are of a high standard, these risks are greatly reduced. The COVID-19 pandemic has made it even more important to ensure hygiene in tourist accommodation, facilities and infrastructure.

Health and safety regulations and standards are critical to ensure the quality of the tourism service. Such standards enable providers to improve safety, meet expectations for the safety of participants and staff, and support compliance with applicable legal requirements. Standards are approved and/or recognized by an industry institution, but are also often developed from within the marketplace and adhered to on a voluntary basis. Examples of formal standards that are voluntarily observed in the adventure tourism industry include quality assurance programmes for hospitality and tourism services, such as New Zealand's Qualmark[14] or Australia's T-QUAL,[15] and environmental management standards, such as the Global Reporting Initiative. At global level, the ISO 21101:2014 Standard on Adventure Tourism - Safety management systems - Requirements is set to enhance safety performance, meet expectations for participant and staff safety, demonstrate safe practice and support compliance with applicable legal requirements.[16] Unlike standards, regulations are set by the government, and can be much more expensive to develop, implement and enforce. Many tourism businesses, particularly those involved in adventure tourism and sports, are bound to apply national (and in some cases, to apply voluntarily to international) safety standards and regulations regarding the risks associated with the activities that they offer. For example, mountain tour guides should adhere to strict standards and safety protocols, and should be trained in first aid

[14] For further information, see www.qualmark.co.nz/
[15] For further information, see www.ipaustralia.gov.au/tools-resources/certification-rules/1451608
[16] For further information, see www.iso.org/standard/54857.html

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and client safety procedures. However, in many developing countries there is a high rate of job informality, with unregistered businesses and individuals (mainly incoming agencies, guides and porters, local transport companies and micro catering businesses) not knowing or following safety procedures and lacking any insurance.

Crisis management: Mountain destinations are vulnerable to natural disasters and man-made incidents and crises. These events can result in changes to air routes, closure of access routes, or in the inability to travel, as in the case of lockdowns due to COVID-19. The impact can last for months or years, as the public's perception of the risk may take a long time to change when order is restored. Mountain areas suffer primarily from avalanches, flooding, landslides, earthquakes and tensions due to border disputes. To a lesser extent, they are vulnerable to phenomena such as social unrest, conflict and kidnappings; entire areas can see reductions in tourist arrivals due to such events, even at relatively long distances from where they occurred. For example, following the April 2015 earthquake in Nepal that hit the Gorkha district, in addition to halting any tourist flows in the affected area, the disaster paralysed the country's entire tourist industry for almost one year.

Benefits of tourism for biodiversity conservation: On the positive side, revenues generated by tourism can help nature conservation, and there are several examples of community-led ecotourism in mountain areas. In countries such as Bhutan and Rwanda, high fees for tourists generate substantial funds for conservation and sustainable development. In Rwanda, the Volcano National Park provides multiple benefits thanks to tourist experiences with mountain gorillas. In particular, employment opportunities are offered to local people (including ex-poachers) as guides, trackers and anti-poaching guards (Leung, Y u-Fai *et al*., 2018).[17] Nepal and Peru are using community-based tourism to improve the livelihoods of local people. In the Alps, agroforestry-grazing systems have been practised for centuries, with strong links to downstream markets that enable their sustainable management and use.

The role of tourism in enhancing community involvement for conservation is becoming prominent, together with a trend for people-centred biodiversity management. Many tourism issues have been integrated into countries' National Biodiversity Strategies and Action Plans, and increasingly, consideration of biodiversity issues is to be found within tourism plans. When integrated with nature conservation, tourism implies the wise use of natural resources and the equitable sharing of benefits, particularly for local communities.

[17] Some of the benefits from mountain gorilla tourism include environmental ones. While there are many other variables that affect mountain gorilla populations, experts suggest that the presence of tourists has acted as a deterrent to poachers. Regarding social benefits, between 2005 and 2010, about USD 428 000 were directly invested in Rwandan community projects, including building schools, environmental protection projects (such as tree planting, soil erosion control), the installation of over 30 water tanks that serve at least 1 250 people, and implementing food security initiatives. The projects were financed through a revenue-sharing scheme, whereby 5 percent of tourism revenues from the park fees are used in community projects around the protected area.

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Mountain woman in Kathmandu, Nepal
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4

Product development and mountain tourism



4. Product development and mountain tourism

Sozul and Makhabat are working on iyik – national technique for thread making.
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Promoting sustainable tourism to minimize the environmental impact and maximize the overall socioeconomic benefits at destinations cannot be achieved without an integrated approach to mountain tourism development. UNWTO defines the sustainable development of tourism as "tourism that takes full account of its current and future economic, social, cultural, and environmental impacts, addressing the needs of visitors, the industry, the environment and host communities".[18]

The COVID-19 pandemic offers mountain destinations and businesses an opportunity to rethink the products and services that they offer. Product development, whether of new products or the rejuvenation of existing products, is the cornerstone of a successful tourism business. There are two key aspects to tourism product development: a) It is not an isolated activity, but is part of an extensive and interrelated process; b) Market research, product development and marketing represent a continuum. Failure in any one of these key components will result in the destination not realizing its potential. The variety and typology of tourism product offerings is what attracts tourists to a destination.

There are a number of principles and procedures, whether stimulated by the public sector or arising from private sector or community initiatives, underpinning the sound planning and successful operation of tourism product development. Tourism attractions, activities, facilities and events must, first and foremost, conform to market needs, wants and trends, while enhancing community development and engagement. Operators in destinations need to know what the market likes, what potential visitors are looking for, and how their preferences are changing, now and in the future. Demand is not static and is subject to a wide variety of influences.

[18] For further information, see www.unwto.org/sustainable-development

The challenge for Operators in destinations is how to translate these demand patterns into products, and how to present them. The product development strategy will depend on the specific nature of the resources available: if there is a major attraction, a flagship product approach (a 'wow' product, see Box. 1 below) can be used. On the other hand, if there is no opportunity to highlight 'focal points of attraction' in the destination, a clustered product approach can be chosen, bringing together a set of elements to create a product offer and convince the potential visitor to choose the destination. To this end, the use of festivals and other events that attract visitors who would not otherwise choose the destination, or reduce seasonal imbalances in the movement of visitors, can be valuable.

The following is a series of principles that support sound planning and successful implementation of tourism product development, whether stimulated by the public sector, or arising from private sector or community initiatives (UNWTO and ETC, 2011):

1. Understand market tastes and trends (market research).

2. Fine-tune products to the market.

3. Consult and collaborate widely with stakeholders (including local communities, environmental and social institutions and organizations in the areas in question) in an open and cooperative manner.

4. Designate specific hotspots (or areas) for tourism development.

5. Pursue iconic product development opportunities (with wow factor), if feasible.

6. Identify opportunities for clustered products, circuits and events.

7. Prepare a complete product portfolio and investment plan.

8. Ensure the existence of staff with appropriate tourism expertise at national, regional and local levels to carry out the tourism product development process.

9. Develop a marketing strategy and action plan to support tourism product development and implement a marketing programme.

Finally, tourism product development should:

- be authentic and reflect the unique attributes of the destination;

- have the support of the host community;

- respect the natural and sociocultural environment, without damaging it in any way;

- differentiate itself from competitors, avoiding copying or imitating their initiatives;

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- achieve sufficient scale to make a significant economic contribution, but without creating a major drain on economic resources; and

- use an approach, criteria and practices of sustainability and inclusion in its development (including quality of employment and decent work).

Box 1. Developing an iconic tourism product (wow product)

A potential factor for use in differentiating a destination is the development of flagship products (wow products). These are iconic products or experiences that become the main motivation for travelling to a particular destination.

One example is the recently built 516 Arouca Bridge in Portugal. Consisting of railings and steel cables, with a span of 516 m and towering 175 m above the Paiva River, it is positioned as 'the world's longest suspension pedestrian bridge'. The infrastructure has become a key attraction in the region and has attracted significant media attention.[1]

[1] https://516arouca.pt/en/

The COVID-19 pandemic: a before-and-after moment for mountain tourism

The COVID-19 pandemic has had a devastating effect on the tourism sector. UNWTO data on international tourist arrivals for the year 2020 confirm a 73 percent reduction compared with 2019. The dramatic decline in international travel has accounted for a loss of about USD1.1 trillion in export revenues in 2020 – 11 times more than the decline seen during the 2009 global economic crisis.

Tourism in mountain areas has also suffered greatly. Lockdowns, travel restrictions and the closure of ski resorts have affected all destinations to varying degrees. Paradoxically, in the summer of 2020 many mountain tourist destinations located near densely-populated areas in the northern hemisphere, and less reliant on international tourism, experienced a significant increase in domestic visitors, with sometimes negative effects such as congestion and pressure on biodiversity.

In the United States of America, for example, overcrowding in national parks has led to the implementation of measures such as booking systems (Wall Street Journal, 2021). Other mountain tourist destinations that mainly depend on international tourism and are located in areas with more difficult access have suffered serious economic losses. This situation has been particularly evident in countries such as Nepal and Peru.

COVID-19 and mountain tourism destinations – a marketing perspective

The pandemic is providing the tourism industry with a unique opportunity to rethink and reimagine the way that sustainability is considered, making positive changes to help conserve biodiversity and support local communities, while destinations are recovering. Some destinations and tourism businesses are updating marketing plans, communicating with travellers to encourage

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them to discover, or in many cases rediscover, what makes their destination so different and memorable. Restarting tourism and driving demand towards responsible, more environment-friendly travel can help destinations to thrive in the long term.

Travellers are increasingly aware of sustainable travel choices, and increasingly expect destinations and tourism businesses to be more environmentally aware. According to research by the Expedia Group (2021), nearly three in five travellers are willing to pay additional costs for a more sustainable trip, highlighting environmental consciousness as a value. Consequently, destination and product marketers need to emphasize their sustainability policies and practices in their communication activities, while ensuring that they deliver what they promise and avoid 'greenwashing'.[19] If they do not, they may be subject to negative reviews that can impact their marketing efforts.

Mountain destinations should also help travellers to make more sustainable travel choices by providing tips on how to do so. Destinations can increase the promotion of lesser-known sites and limited-visited places as a management tool to decongest saturated destinations and spread visitors. For example, *Atout France,* the French national tourism organization, has launched a national campaign 'What really matters #ExploreFrance',[20] based on sustainability and environmental travel. This is a guided tour of France's natural and cultural areas, heritage and the French *art de vivre*, fully focused on slow tourism. French mountain areas could greatly benefit from this approach.

The COVID-19 crisis offers potential to sharpen the mountain tourism offer to reflect the needs of new markets likely to emerge following a post-pandemic recovery. While smaller in scale, these markets are expected to be more ethical and low-impact, and therefore represent a more sustainable focus for the future. The challenge is that much of the world will be targeting such markets, so only the more focused and professional mountain tourism destinations will be successful. Here are some ways to achieve this:

- Read the market research on post-COVID-19 emerging markets, or better still conduct customized online market research to market test your own strategies.

- Focus new products on experiences that integrate outdoor activities/ contact with nature with a sense of freedom and reinvigoration.

Mountain tourism products that could emerge most quickly in the recovery are those based on nature tourism, rural tourism, wellness tourism, spiritual tourism and gastronomy tourism. This includes rural tourism supply, such as agritourism and mountain ecolodges, and the service providers linked to activities in nature: environmental guides, wildlife/flora-watching, mountain trekking guides, nature tourism interpreters, storytellers, mindfulness experts, etc. Mountain protected areas and botanical gardens could also play an important role.

[19] A form of marketing spin in which green PR and green marketing are deceptively used to persuade the public that an organization's products, aims and policies are environmentally-friendly.

[20] Source: https://franceuncovered.com/2021/05/19/whatreallymatters/

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Mountain destinations with a strong identity, with features that differentiate them from their competitors and guarantee not only safety, but also natural and cultural sustainability, will be more competitive in terms of capturing the market.

Tourist businesses must adopt and promote their measures to achieve a safe health and hygiene (biosafety protocols) experience, supported by the guidance and assistance of national and local authorities.

Given their often challenging access, managers of mountain tourism destinations will need to plan ways to provide flexible and reliable responses to changing circumstances relating to health conditions and changes to travel and border access. These managers will need to assure customers that they can actively assist them in reorganizing travel plans, minimizing disruption and ensuring that they can leave if they need to do so. Destination managers should consider implementing tools to monitor, report on and make decisions to minimize impacts and maximize the quality of the experience and benefits to the destination and its community. A case in point is the UNWTO Network of Sustainable Tourism Observatories,[21] which monitors the economic, environmental and social impact of tourism at the destination level. One of its members, the Tourism Observatory of South Tyrol,[22] is measuring indicators such as local satisfaction, employment, seasonality, land-use and landscape diversity, energy and water management, in an effort to gauge the impact of tourism on the economy, society and the environment.

Develop and innovate: a year-round sustainable tourism product

For mountain tourism to flourish, it is critical to generate diversification, upgrading and revitalizing products and services. To reinvigorate mountain tourism, new and innovative products (with wow factors) must be developed and marketed, which can transform mountain areas into attractive tourist destinations, particularly for the shoulder season.[23] Mountains have much more to offer than snow sports in winter and hiking in summer. Among the many possibilities are gastronomy tourism, community-based tourism, spiritual tourism, wellness, rural tourism, agritourism and cultural tourism.

Reinvigoration is already under way in some mountain destinations, where there is a lead operator with capital to invest and skills to make it work. In many developing countries and emerging mountain destinations, product revitalization is being hampered by a lack of growth and associated capital. These constraints are partly due to fundamental challenges associated with mountains, such as limited access, insufficient infrastructure (energy, water, sewerage and communications), limited access to skilled labour and higher building and operating costs. Many well-intentioned investments in mountain tourism in developing countries take the approach of giving a great many recipients a little money for a short period of time. A more sustainable approach might be to concentrate more funds in fewer areas for longer periods, sufficient for the investment to work and then be used as a model for others.

[21] For further information, see www.unwto.org/sustainable-development/unwto-international-network-of-sustainable-tourism-observatories
[22] For further information, see https://sustainabletourism.eurac.edu/
[23] Shoulder season refers to the period between peak and off peak season.

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Too often, the mountain tourism industry still focuses on the obsolete type of tourism products of high and low season. As a result, marketing focuses on summer and winter tourism, and product development is limited to classic hiking, skiing and trekking. Many actors are not sufficiently aware that extending offerings to include a year-round calendar is often a critical measure.

In many mature ski-based mountain tourism destinations (such as the European Alps, some North American destinations and the Chilean and Argentinean Andes), winter visitor numbers and revenues have been declining. Snowfall has become less predictable, lasting for less time and producing snow of lower quality, while the cost of staying in such places is increasing. Some destinations have 'traded down' their markets to target lower-spending visitors, who access the destinations through budget airlines and associated packages. Another strategy has been to tap into the 'green season' through the introduction of better walking, cycling, horse riding and culture-based experiences. This is mainly being done in developed countries, where there is access to private capital. However, such an approach also requires changes to accommodation, and restaurants to shift from the winter design of keeping the warmth in, to a summer design of being open to nature. Few operators have managed to adapt their buildings to achieve this annual transition. In most cases, income from tourism in summer has not compensated for the decline in income from white season tourism. This is resulting in assets going to an over mature stage in their product lifestyle, and becoming outdated and less competitive.

It is important to ensure that natural and cultural heritage, as well as local traditions, are conserved in mountain regions. Religious monasteries, cities of past cultures, ancestral ceremonial sites, dry stone walls, pastures, traditions such as mountain pastures and transhumance, and other components of natural and cultural heritage represent tourist assets with undeniable value. To make the most of them, it is essential that stakeholders and local authorities fully assume their role as coordinators, in order to avoid conflicts of interest. Likewise, the natural and cultural landscapes of mountains should be valued as a primary tourist asset. For example, increasingly tourists are attracted by the prospect of disconnecting from the hectic lifestyle of the digital society, making the beauty and authenticity of mountains' natural heritage a valuable selling point.

In recent years, sustainability has become an increasingly important issue for the younger generation. Tourism can build on this potential if it can develop new products and services targeting these customer segments. Sectors that in the past were mainly niche activities, such as ecotourism, adventure tourism, wellness tourism, rural tourism and agritourism, are increasingly gaining importance and becoming mainstream. Regional and local specialties, cultivated according to the principles of sustainable development, can create a close relationship with nature, which is increasingly appreciated by visitors.[24]

[24] For example, the Shewula Mountain Camp in Eswatini invites tourists to stay in a village and to experience the rural lifestyle of a local community, and enjoy the scenery via walking trails, while learning about local culture.

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For example, 'painmoon' tourism is gaining in popularity,[25] especially for the generation that has grown up in the digital world. Mountain destinations are ideally positioned to meet the needs of such clients.

There are many innovative ways of ensuring a more sustainable future for mountain tourism destinations. Energy-efficient snowmaking and the use of renewable energy for ski-lifts are just some of the promising approaches being set in place in some mountain areas.[26] In addition, raising awareness of sustainability and including this issue in the education system are essential for a successful transition to more sustainable tourism. A shift from more climate-sensitive and impactful tourism products and activities (such as alpine skiing) to less impactful ones (such as mindful tourism, inspirational tourism) will also contribute to more sustainable mountain tourism development.

Governance – a management perspective for sustainable mountain tourism

The effective implementation of sustainable development programmes and projects is often hindered by the divergent interests of the stakeholders involved (tourism sector, environmental and heritage protection, agriculture, mining, etc.), the lack (or in some cases, weak) involvement of the private sector and local communities in design and implementation, and scant market vision. It is therefore important to improve governance and coordination and consider an integrated approach with a clear common vision, together with the business sector. This implies the creation of adequate destination management organizations (DMOs) that play a leadership role in the planning and management of tourism in mountain areas.

Synergies with other sectors: integrated approaches promote win-win relationships

In mountain regions, there is strong potential for cooperation between tourism and other sectors, such as agriculture, pastoralism, handicrafts, health and culture. In addition, the energy sector, natural hazard prevention, water resource management, biodiversity conservation and education have many points of contact with tourism. However, there is generally only limited integration between mountain tourism and these sectors. Integrated approaches can strengthen mountain tourism and expand the tourism supply, and both the tourism sector and politicians have a responsibility to improve synergies.

There are several causes for the untapped integration between mountain tourism and other economic sectors, including the fact that often policies do not sufficiently take into account the cross-cutting nature of tourism and the many links it has with other sectors.

In mountain regions, concrete programmes and projects should be developed responding to the real needs of local communities and businesses, but always with a view to contributing to regional, national and global well-being and

[25] Painmoon is "travelling with the aim of recovering from a stressful period or a period of hard work"; see for example the website of Iron Mountain Hot Springs: www.ironmountainhotsprings.com/whats-a-painmoon-why-take-one/

[26] See: Energy efficiency opportunities for ski industry snowmaking processes, www.aceee.org/files/proceedings/2001/data/papers/SS01_Panel1_Paper27.pdf, and Energy efficiency ski resorts, www.motiva.fi/files/12237/Energy-efficient_Ski_Resort.pdf

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context. Agriculture, crafts, health, culture and education are natural and indispensable partners in supporting tourism development, as mountain regions are rich in these resources. Integrated approaches can create a win-win situation for the economic prosperity of mountain regions in a holistic way, by networking with different value chains.

Digitalization as a strategic asset of mountain tourism

Digitalization should be a priority objective for any tourism development strategy, and particularly for mountain destinations. The remote locations of mountains make them strong contenders for the benefits of digitalization. Business processes and customer behaviour have changed rapidly in the past decade. Digitalization has become key to improving and simplifying core business, marketing, pricing and booking processes, thereby increasing efficiency and reducing costs. In parallel to the need for advancing the digitalization of mountain tourism providers, an increasing number of digital nomads are now able to live and work remotely from different locations – a trend that has attracted the attention of many destinations, which have seen in the COVID-19 pandemic an opportunity to diversify their clientele and at the same time buffer the loss of tourists due to travel restrictions.

However, the digital transition is a time-consuming and costly process. It can only be successful if certain conditions are met, including good infrastructure and high-speed Internet networks, which should be a priority for policy-makers. In peripheral and remote mountain regions, such infrastructure is often not available, or is available only to a limited extent.

At the same time, there is a need to raise awareness among mountain tourism stakeholders of the potential benefits of digitalization. In order to successfully implement digital business processes, such as in marketing, tourism product development or data, the exchange of best practices, lessons learned and close cooperation between stakeholders are all essential. Introducing digital management processes can lead to an increase in productivity, which has a positive effect on the competitiveness of tourist destinations. There is a need to orient marketing towards customer experiences and offer tailored mountain tourism packages, while working with global players such as Google, booking.com, Vrbo and Airbnb.

Talent retention and development: strengthening the tourism labour market

Mountain tourism often faces challenges of job retention, with high staff turnover and migration of qualified specialists. This situation limits the possibilities of developing long-term capacity-building and know-how.

Attractive working conditions and well trained employees are key to success in mountain tourism. Job rotation and the exchange of staff between companies are among promising ways of offering employees long-term development prospects in the mountain tourism sector. In order to broaden the professional skills of employees and increase their motivation, both technical vocational training and university-based training should be updated and/or relaunched in many mountain countries, and further education in the tourism sector should be made as accessible as possible. This requires closer cooperation between

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tourism businesses and training institutions, and the creation of appropriate training platforms.[27]

At management level, there are many opportunities to develop and strengthen skills, including regional mentoring or coaching from experienced entrepreneurs, as well as the exchange of best practices and lesson learned. The availability of venture capital and attractive rewards for innovation are two ways of attracting talented young entrepreneurs to mountain tourism. In addition, it is important to strengthen digital competencies in education systems, investing in digital skills, particularly for those who are temporarily unemployed or seeking their first job, including women, youth and other disadvantaged groups. This requires encouraging start-ups and the availability of a sufficient number of well trained specialists, including in the field of data management and protection.

'Green' investments

'Green' investments and funds are currently gaining significant market importance, including in the mountain tourism sector, where they can help to ensure a low-carbon, resilient, resource-efficient and socially inclusive transition. A wide range of green investment opportunities are available to address greater sustainability in tourism, such as water management, energy efficiency, waste management, conservation and the enhancement of natural and cultural heritage (see Box 2). In addition, investments are a crucial component for the recovery and strengthening of the tourism ecosystem due to the impact of the COVID-19 pandemic.

Box 2. Investment opportunities to support green innovation in mountain tourism

Energy-efficient transition: in the accommodation sector, there is ample scope for investments in green performance, including improvements to refrigeration, television and video systems, air conditioning, heating and laundry, addressing energy efficiency and the use of renewable sources.

Water management: there is scope for financing green performers to improve internal water efficiency per guest.

Waste management: improving waste management can increase mountain tourism sustainability and resource efficiency, enhancing the attractiveness of destinations, and creating job opportunities. Sourcing sustainable supplies and recycling waste are important options.

Biodiversity: maintaining ecosystems is at the core of sustainable tourism. There are opportunities for green performers and green innovators in protecting the natural resource base, while mainstreaming sustainable tourism.

Cultural heritage: investments that maintain cultural heritage while offering opportunities for continuation, rejuvenation or enhancement of traditions improve the tourism offer and contribute to distributing the benefits of tourism among the local population.

Source: Organisation for Economic Co-operation and Development

[27] In Italy, an attempt has been made to address this issue by the University of the Mountain, active in Edolo, in Lombardy's Valle Camonica, since 1996. It offers a degree course in 'Valorization and protection of the environment and mountain territory', managed by the University of Milan (www.unimontagna.it/en/). There is an additional attempt in Switzerland to establish an interdisciplinary university (Alpine University) with several locations in mountain regions.

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There is growing demand from the public and private sectors to invest in making tourism more sustainable, and mountain destinations can be attractive candidates for green investment. Public sector involvement in financing sustainable tourism development is essential, to unlock finance, provide incentives and build capacity. The European Union has implemented a range of initiatives to support the development of sustainable and responsible tourism. Among them is the European Commission's Programme for the Competitiveness of Enterprises and Small and Medium-sized Enterprises (COSME), which supported around 100 projects during 2014–2016,[28] such as the development of transnational cycle or hiking routes, and European Cultural Itineraries, including mountain destinations. In the context of the European Destinations of Excellence (EDEN) initiative, the European Commission co-financed the promotion of 140 lesser-known destinations, mainly in rural and mountain areas.

Mountain destinations in developing countries have strong potential to attract green investment. However, the lack of qualified staff, poor quality of tourism statistics, and inadequate investment plans are major barriers to attracting funds.

[28] Source: https://ec.europa.eu/growth/smes/cosme_en



Agricultural hub for grape and olive production in Tuscany, Italy
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Machu Picchu Pueblo, Peru
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5

Conclusions and the way forward

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5. Conclusions and the way forward

Sarez Lake in Tajikistan
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A sustainable approach to mountain tourism can promote local economies, while preserving cultural identities and maintaining a balanced use of resources. Mountain destinations, rich in natural and cultural heritage and diversity, are well positioned to capitalize on the shift ushered in as a result of the COVID-19 pandemic, by adopting more sustainable, responsible and inclusive tourism models, guided by UNWTO's Global Code of Ethics for Tourism.[29]

Destinations should encourage sustainable travel practices, with the help of targeted marketing initiatives. These should include promoting community-based tourism, with activities and experiences that respect local cultures and values. Awareness-raising about the negative impacts of tourism on mountains' unique ecological and social systems, as well on behaviour change in the people who live there, is also needed at all levels, including for individual mountain tourists, tourism businesses and service providers, and policy-makers.

Mountain communities, and in particular traditionally marginalized groups (women, youth, indigenous people), need to be empowered, so that they can benefit from the opportunities that tourism can bring to their regions and handle the potentially negative impacts on the environment and their culture. Innovative circular economy models, waste management, skills development, digital infrastructure and access to green finance are some of the key areas where efforts and investment are needed in order to promote sustainable tourism in mountain areas.

[29] For further information, see www.unwto.org/global-code-of-ethics-for-tourism

As the only United Nations voluntary alliance of partners dedicated to improving the lives of mountain people and protecting the world's mountain environments, the Mountain Partnership together with UNWTO – the United Nations agency responsible for the promotion of responsible, sustainable and universally accessible tourism – is recommending the following actions:

- Promote climate-sensitive, low-impact tourism in mountains.
- Monitor tourism in mountains and its impact to better manage resources and waste produced, respecting destinations' carrying capacity.
- Empower mountain communities to take the lead in tourism development.
- Strengthen public-private partnerships to innovate and develop year-round tourist offerings.
- Invest in infrastructure in remote mountain regions, particularly in the digitalization of tourism services.

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The path to Lago Lungo (2725 m)
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6

Case studies on mountain tourism development and management



6. Case studies on mountain tourism development and management

Hosts from Narchyang welcoming visitors
© Community Homestay Network Pvt. Ltd.

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The case studies presented in the next section showcase projects and initiatives for the development and management of tourism activities in mountains from around the world. They present results obtained and challenges encountered by private and public actors in applying approaches and solutions to tourism development in the following broad domains: cultural tourism, food tourism, nature-based tourism, rural tourism, snow and winter tourism, innovation and digitalization, and governance models and policies for sustainable mountain tourism (see Table 1).

Table 1: Summary of case studies, ordered by country/region.

Country or region	Cultural tourism	Food tourism	Nature-based tourism	Rural tourism	Snow and winter tourism	Innovation and digitalization	Governance models and policies for sustainable development of mountain tourism
Alpine – Mountaineering villages for sustainable Alpine tourism	X		X				
Argentina – The Central Andes and sustainable development: The Mendoza High Mountains Strategic Plan, Argentina	X				X		X
Australia – Climate change adaptation for ski resort destinations – Mount Baw Baw, Australia					X		
Carpathian – Carpathian tourism – Training local entrepreneurs	X		X	X		X	

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Country or region	Cultural tourism	Food tourism	Nature-based tourism	Rural tourism	Snow and winter tourism	Innovation and digitalization	Governance models and policies for sustainable development of mountain tourism
Chile – Mountain Tourism Impulse Plan: Chile looks to the Andes			X				X
China – Mountain Huangshan – The best practice of sustainable tourism development	X		X			X	X
Democractic Republic of Congo, Rwanda and Uganda – Mountain gorilla tourism: A true conservation success story	X	X	X				
India – Astrostays, Leh, Ladakh, India			X	X		X	
Iran – Empowering nomadic Iranian tribes through ecotourism	X	X	X				
Italy – Community-based tourism in Castelmezzano, southern Italy			X	X			
Italy – Promotion of responsible tourism in northern Italy: Associazione Naturavalp	X	X	X				X
Italy – Monitoring the impacts of the COVID-19 pandemic on tourism – The case of South Tyrol, Italy							X
Nepal – Nepal: Trekking and beyond	X			X			
Philippines – Food and tourism for mountain development in the Philippines	X	X					
Slovenia – Joining forces for a greener future: Alpine tourist destinations in Rogla-Pohorje, Slovenia		X	X		X	X	X
Switzerland – A mountain hotel as a driving force for innovation and sustainable development, Switzerland		X		X		X	
Tunisia – Destination Dahar©: Mountain, sea and desert – The new tourism in Tunisia	X						X
United States of America – The Roaring Fork & Farm Map: Agritourism in Colorado, United States of America		X		X			
United States of America – Vail, Colorado, United States of America: Becoming Mountain IDEAL	X		X				X



The Mountaineering Village of Lungiarü, in the Italian province of Bolzano/South Tyrol
© Tourism Association San Vigilio / San Martin – Dolomites

Mountaineering villages for sustainable Alpine tourism

Marianna Elmi and Stephanie Wolff [30]

The Mountaineering Villages (*Bergsteigerdörfer*) initiative was established to address the environmentally and socially negative consequences of tourism development. It promotes a more sustainable form of Alpine tourism by fostering a sense of responsibility for the natural and cultural heritages of the European Alps.

The initiative aims to contribute to implementation of the Alpine Convention at the local level. The Alpine Convention is an international treaty for the protection and sustainable development of the Alps, signed by the eight Alpine countries (Austria, France, Germany, Italy, Liechtenstein, Monaco, Slovenia and Switzerland) and the European Union.

The Mountaineering Villages project was started by the Austrian Alpine Association in 2008 and has since developed into an Alpine-wide initiative. As of summer 2021, the network included 35 villages: 22 in Austria, 4 in Germany, 5 in Italy, 2 in Slovenia and 2 in Switzerland. The project covers a total surface of around 3 000 km^2 and 44 200 inhabitants.[31] Villages applying to become a Mountaineering Village must adhere to a set of strict criteria, including:

- support local culture and traditions;
- provide sustainable tourism options, with a focus on mountain activities;
- actively conserve nature and landscapes, including avoiding big new

"Each village shares the conviction that tourism development is not strictly related to infrastructure development. They believe an enrichment of tourist facilities and services can also be built on nature-based foundations and cultural specificities, and community buy in is fundamental."

[30] 'With special thanks to the "Bergsteigerdörfer – Mountaineering Villages" Association and Vera Bornemann, Permanent Secretariat of the Alpine Convention'.

[31] This figure is based on the total municipal surface area in which the villages are located.

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developments in infrastructure;

- plan new developments to be in harmony with what already exists;
- support local producer in farming, forestry and other sectors;
- encourage the use of public transport and discourage car use through adequate public transport and cycling and walking routes; and
- promote exchanges among Mountaineering Villages.

A set of targets has also been established to ensure that the Mountaineering Village designation serves to promote continuous progress towards sustainable tourism. Targets include: the further development of public transport services and infrastructures, interconnections between the initiatives for the promotion of local culture organized at the destination, the development of specific guidebooks and maps, and the establishment of 'up and running' nature reserve services combining tourism and nature protection.

Two key elements make the Mountaineering Villages initiative unique. It utilizes an approach based on the involvement of and cooperation among actors in the destinations, as well as between the villages included in the network and with the Alpine Convention. It is also a transnational initiative.

The success of the existing Mountaineering Villages has inspired other communities across the Alps. In 2021, six new villages joined the initiative, including the first two in Switzerland.

The appeal of the title is growing. Interest lies in the recognition of being a pioneer of sustainable tourism and being part of the network of communities. The villages hold annual meetings to exchange experiences and develop new, cross-cutting projects.

One of the biggest challenges of the Mountaineering Villages project is keeping local actors interested and engaged. At the start of the initiative, often only one coordinator (e.g. mayor or tourism representative) led activities at the local level. Since 2013, the responsibility has often been shared among a group of people to ensure continuity of the initiative in the event of retirements or changes of office.

Each village is different in terms of existing infrastructures, economic strength, cultures and approaches to living. However, all the villages share the conviction that tourism development is not strictly related to infrastructure development. They believe an enrichment of tourist facilities and services can also be built on nature-based foundations and cultural specificities, and community buy-in is fundamental.

Creating a shared vision of tourism development between different actors and stakeholders is both challenging and rewarding. The ideal of the Mountaineering Village is that locals should stand behind their village – which is another important lesson to be drawn from understanding the success of the project thus far.

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Being a Mountaineering Village requires meeting strict criteria, focusing on what a community wants to achieve in the future, beyond tourism development. A commitment to the philosophy and the vision of the Mountaineering Villages has made the project a success – and the greatest lesson learned is that a socially and environmentally sustainable life in the Alps is possible through hard work and dedication.

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The Central Andes and sustainable development: The Mendoza High Mountains Strategic Plan, Argentina

Andean starfield in Polvaredas
©Montón, G.

Marcelo Reynoso, María Clara Rubio, Pamela Salinas, Federico Morábito, Elena Abraham, Cecilia Rubio, Fabián Díaz, Lorena Gil Fain Binda, Cecilia Zabala, Silvia Lo Bello, Pablo Betancourt and Gustavo García

The Mendoza High Mountains Strategic Plan (MHMSP) is a key instrument for the public management and land-use planning of the Aconcagua region, Argentina. It involves stakeholders from government, the private sector, scientists and local communities in the Central Andes to promote collective action for making Aconcagua a sustainable tourism destination, within the context of climate change and COVID-19 (Figure 1).

The MHMSP is supported by the Federal Investment Council of Argentina and the Inter-American Development Bank. The Commission for Sustainable Development of the High Mountains of Mendoza comprises actors from the public and private sectors and was created to monitor the plan's follow-up.

Climate change adaptation and mitigation are part of the process outlined in the MHMSP, and support for the adoption and incorporation of new technologies plays a central role. Local communities whose livelihoods depend on snow tourism are vulnerable to the impact of climate change. Different mechanisms have been incorporated into the plan to promote mountain villages' adaptation to climate change, to reduce their vulnerability.

One of the main results achieved includes securing foreign investments to develop infrastructure and services in the towns of the Central Bioceanic Corridor. For example, works are being carried out to turn the mountain village of Las Cuevas into a mountain sports centre in the Central Andes; to make the town of Puente del Inca a cultural destination for the dissemination of knowledge on the multiculturalism of the Andes; to make the town of Penitentes a multifunctional centre for adventure and snow tourism; and to

"To strengthen governance, there is a need for clear mechanisms and parameters to promote the effective participation of all actors."

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promote the town of Polvaredas as an agro-ecological centre and hub for the exchange of local handicrafts from the high mountains.

Among the lessons learned from this strategic planning process, the importance of incorporating the Sustainable Development Goals as a strategic framework stands out. This has contributed to the sustainability and operation of the projects despite the COVID-19 pandemic. On the other hand, to strengthen governance, there is a need for clear mechanisms and parameters to promote the effective participation of all actors. Likewise, it should be noted that the systemic vision built from the ties established between the governmental, scientific and civil society sectors constitutes one of the keys for achieving the proposed objectives for the integral and sustainable development of the high mountains of the province of Mendoza.

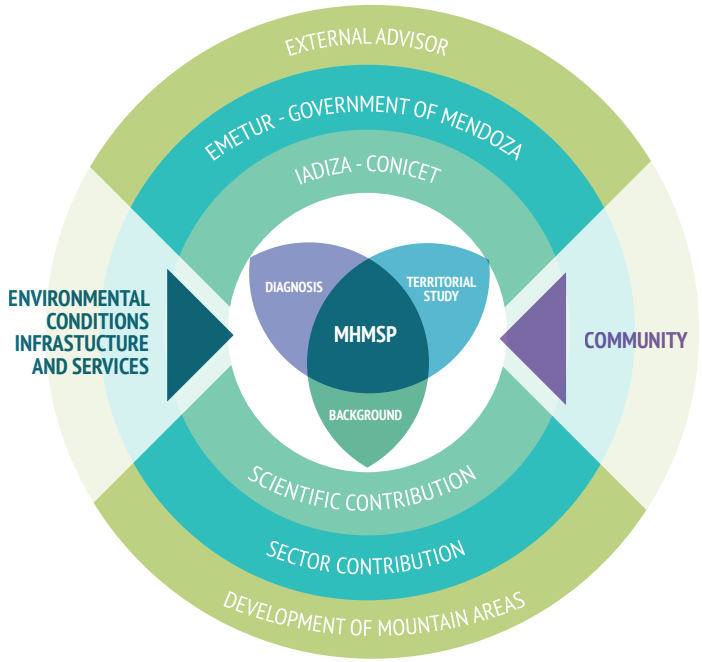

Figure 1. *Methodological process for the development of the MHMSP. Source: Own elaboration*

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Climate change adaptation for ski resort destinations – Mount Baw Baw, Australia

Snow slopes in Australia
©Tarryn Myburgh/Unsplash

Simon McArthur

The Baw Baw National Park is a 13 530 hectare (ha) protected area located in the south eastern corner of Australia, approximately 120 km east of the major city of Melbourne. Mount Baw Baw is one of several peaks on the Baw Baw Plateau. The mountain peak is relatively low at 1 567 m, generating a subalpine climate.

The Mount Baw Baw Alpine Resort is a 30 ha lease area surrounded by the Baw Baw National Park. Visitation is dominated by the winter season, and averages 50 000 to 70 000 visits per annum, making it the least visited of all of Australia's alpine resorts (Mount Baw Baw Alpine Resort Management Board, 2015). Mount Baw Baw has high visitation from 'first timers' and 'beginners', and has an ethnically-diverse visitor demographic. Visitors to Mount Baw Baw during the 2015 winter spent on average USD 35–44 per person per visit (Mount Baw Baw Alpine Resort Management Board, 2015).[32] Mount Baw Baw contributes approximately USD 5.85 million to the Baw Baw Shire's headline Gross Regional Product, and total annual equivalent resident employment opportunities generated by the resort were 178 (0.8 percent of the Local Government Area total).

Because of climate change, the duration of the snow season in the state of Victoria is very likely to become shorter, have a slightly later start and generate lower maximum natural snow depths (Bhend *et. al.,* 2012).

Profitability from the 'white season' is no longer sufficient. The resort has been dependent on government assistance funding of USD 2.34–3.9 million per year to meet operational expenditure requirements that are not covered by revenue generated by the resort (Mount Baw Baw Alpine Resort Management Board, 2015).

[32] AUD 1 = USD 0.78.

"Many mountain tourism ski resorts like Mount Baw Baw will face increasing volatility due to climate change. This case study has profiled a process and staged proposal to adapt a particularly vulnerable ski resort into a more resilient destination and operation."

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In 2016, resort management decided to start transitioning towards a 'green season' focus, so as to increase yield from vacant infrastructure and facilities and make the overall operation sustainable (Mount Baw Baw and Lake Mountain Alpine Resort, 2016). Two options were developed following an analysis phase that included stakeholder consultation, analysis of visitor and financial data, tourism product and infrastructure audit, and online market research with green and white season visitor markets.

The first option was to work with all the other alpine resorts, aiming at specialization and positioning to minimize duplication and maximize competitiveness and ease for the market to choose the resort that best meets visitors' needs.

The second option, the one that was accepted, focused on reinventing and then repositioning through an offer that was less impacted by climate change.

It was proposed to use the repositioning to introduce a staged shift in target markets, aligned to the staged implementation of mountain tourism product reinvigoration. The staged implementation plan interlinked repositioning, target markets, product development, infrastructure and marketing.

In the short term (first two years), a number of economical initiatives were proposed to improve the offer across all seasons. Most of the recommended product development strategies were based on bringing simple snow play into the green season, by trialing dry slopes and magic carpets. Mount Baw Baw would be differentiated from other resorts by offering a version of snow play all year round.

The medium term (three to five years) proposed scaling up investment in tourism product development to improve depth of offer and subsequent length of stay and revenue from white and green seasons:

- To drive growth from the white and green season, the enhancement of the main ski run to deliver easily accessible white and green season skiing, featuring chair lifts, dry slope, bouldering and a snow factory to make snow outside the limiting temperature range currently possible.

- To diversify and drive growth from the green season offering, the development of a two-level school programme, featuring adventure facilities and environmental education challenges.

Focus group markets were used to test the appeal, likelihood to trigger an overnight visit and preferred price point for the proposed products with the proposed target markets.

The long term (six to ten years) proposed a focus on creating a significant indulgence experience and self-contained accommodation to convert the activity investments into room night revenue in the green season.

The resort management and local stakeholders have been inspired to have a logical and staged plan to follow. At present, the resort has implemented the short-term recommendations, and is seeking funding to implement the medium-term proposals.

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Many mountain tourism ski resorts like Mount Baw Baw will face increasing volatility due to climate change. This case study has profiled a process and staged proposal to adapt a particularly vulnerable ski resort into a more resilient destination and operation. Much of this case study is transferable to other mountain tourism destinations.

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Boat tour with locals along a river
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Carpathian tourism – Training local entrepreneurs

Ágnes Szabó-Diószeghy and Tamara Mitrofanenko

The Carpathian Mountains, one of Europe's largest mountain ranges, stretch over the territory of seven countries (Czech Republic, Hungary, Poland, Romania, Serbia, Slovakia and Ukraine). The Carpathian region, covered by forests and part of three river basins (Danube, Dniester and Vistula), provides a habitat to the largest populations of brown bears, wolves, lynx, European bison and imperial eagles in Europe, and to 481 endemic plant species. The region constitutes an important economic, cultural and recreational environment. Thirty-six registered UNESCO World Heritage sites and 49 important pilgrimage destinations are located in the Carpathian area, as well as many national parks and biosphere reserves.

The region has high potential for the development of rural tourism. However, the lack of knowledge on entrepreneurship, management and promotion of tourism resources poses immense challenges to local enterprises, such as rural tourism providers, local artisans and social enterprises.

Funded by the Visegrad Fund, the project 'Cooperation of V4+ rural tourism actors through social and digital innovation' provided training, webinars and handbooks to local entrepreneurs between 1 October 2018 and 20 March 2020. Partners in the project included Art and Craft of Stiavnica Civil in Slovakia, Brasov County Council in Romania, Ekopsychology Society in Poland, Homeland Museum of Knjaževac in Serbia, Humtour LLC in Hungary, and Vavel in Serbia.

An e-learning platform launched as part of the project allowed a wider target group in the region to access the webinars and use the new tools for their product promotion. Experts provided individual consultations and follow-up

"Promoting handicrafts and small-scale industrial products supports the sustainable development of tourism, in particular by maintaining cultural heritage and traditional forms of farming, minimizing the negative impact on the environment, and boosting livelihoods."

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programmes to support the participants to apply the tools in the promotion of their destination, local products or services on regional and international markets. Table 2 presents the main project activities and results.

Table 2. *Project activities and results*

Project activities	Description and main results
Sessions at the first World Agritourism Congress 'The Role of local products in agritourism – Carpathian approach for sustainable rural areas' in Bolzano, Italy	Main challenges identified include: lack of resources, lack of marketing capacities among the local stakeholders, lack of cooperation at local and national level.
Workshop ,'How to manage an ecotourism business: Digital communication and building identity marketing and management' in Cserkút, Hungary	Participants tested the application of new marketing techniques (content marketing, blogging, search engine marketing, review management, customer satisfaction) and learned how to increase the quality and visibility of their tourism products. The workshop created a cooperation platform where local tourism suppliers can meet experts from different sectors and discuss ideas for further projects.
Workshop 'Social enterprises and community development in rural areas' in Uherce Minerale, Poland	Participants implemented their social enterprises' business models and plans through facilitated interactive exercises, developed 15 business plans and found different cultural approaches to support social entrepreneurship in rural areas, including: • Carpathian Ultra Trail Tour; • Forza agency for sustainable development of the Carpathians; and • Fair trade buffet in the Tatra Mountains.
Handbook 'Management and marketing tools for rural tourism entrepreneurs'	The handbook introduces social business management, social tourism management practices, social media and marketing tools.

The main lessons learned included:

- Strengthening links between rural services around the Carpathian region is key for supporting rural entrepreneurships.
- The involvement of authorities at local and national level, understanding the needs of producers, and providing policy support to them are all highly important.
- Building the capacities of tourism providers plays an important role in improving branding and marketing, as well as innovation and sales of agritourism products.Using participatory methods to involve local communities is useful when identifying ideas for branding and marketing local and regional products.
- Legal restrictions and regulations on serving local products directly to guests limit the potential of farmers to develop agritourism.
- Promoting handicrafts and small-scale industrial products supports the sustainable development of tourism, in particular by maintaining cultural heritage and traditional forms of farming, minimizing the negative impact on the environment, and boosting livelihoods. These activities are also important for creating a positive image of the region.

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Project results and lessons learned were communicated to the Secretariat of the Carpathian Convention and the Convention's Working Group on Sustainable Tourism.



View of a Carpathian mountain village
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Tourist gazing at wild nature in the Andes
©Sernatur

Mountain Tourism Impulse Plan: Chile looks to the Andes

Sebastián Seisdedos Morales, Francisco Díaz Ibáñez and Nicolás Carvallo Pirola

Chile has comparative advantages that position it as an important adventure and nature tourism destination, mainly thanks to the Andes mountain range. The country received the World's Leading Adventure Tourism Destination award for five consecutive years between 2016 and 2020.[33] However, the mere presence of the Andes is not enough in itself to have earned Chile this title.

In recent years, tourism has become one of the most dynamic economic industries in Chile, contributing significantly to employment and the country's gross domestic product. According to the Chilean Ministry of Economy, as of 2017, 95 percent of tourism companies were medium- or small-sized companies, so tourism has the potential to create opportunities for local communities.

However, the COVID-19 pandemic has strongly affected the sector. Tourism must now seek new ways to attract more local, national and international travellers by diversifying its offer and tourist destinations. Trends show that new travellers will be looking for experiences in nature, with an emphasis on sustainable destinations and opportunities to connect with local communities.[34]

These challenges represent a valuable opportunity for Chile. For this reason, in October 2020, the Chilean Economic Development Agency (Corfo) launched the Mountain Tourism Impulse Plan through its *Transforma Turismo* (Transform Tourism) programme. The main objective of the Mountain Tourism Impulse Plan is to promote the development of adventure, nature and sports tourism

"The COVID-19 pandemic has strongly affected the sector. Tourism must now seek new ways to attract more local, national and international travellers by diversifying its offer and tourist destinations."

[33] World Travel Awards, Chile Best destination worldwide for Adventure Tourism (2016, 2017, 2018, 2019, 2020).
[34] Adventure Travel Trade Association (2020), "Adventure Travel Trends Snapshot".

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experiences in the mountains in Chile and to create a network of mountain destinations with more competitive, safe and sustainable tourist experiences and activities. The plan includes a roadmap for improving the environmental sustainability of tourism services,[35] human capital development plans for mountain guides and tour operators, and a strong emphasis on public-private sector coordination to make investments in mountain areas.

Transforma Turismo is a public-private alliance in which the main tourism stakeholders (public sector, private unions, guilds and universities) work together collaboratively. Its objective is to improve the tourism industry through the reduction of coordination failures between public and private agents and by generating a better environment for productivity, innovation and entrepreneurship. The programme includes a strong roadmap of initiatives for the short, medium and long term, and mountain tourism is now a priority for post-pandemic sustainable recovery.

A strategic committee comprising seven public institutions has been put in place to monitor the plan's implementation, and is being coordinated by *Transforma Turismo*. The role of the Chilean Ministry of National Assets is key in this national strategic mountain tourism committee, since the ministry owns and manages 37 percent of Chilean mountain territory. The committee called on each of Chile's diverse 16 regions to nominate mountain destinations to be promoted, with different levels of development.

Twenty destinations throughout the country were chosen, including the Lauca Biosphere Reserve in the highlands of northern Chile and Dientes de Navarino, a pristine destination in the Cape Horn archipelago of southern Chile.

As an early result, the plan is supporting guide associations to acquire international certifications and is also boosting territorial programmes, aligned with the national plan, but with a local focus.

[35] The Distinction in Sustainable Tourism, graphically recognized with the S Seal, guarantees the visitor that the tourism service that has this distinction meets global criteria of tourism sustainability, in the sociocultural, environmental and economic fields (http://www.chilesustentable.travel/distincion/antecedentes/).

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Mountain town in China
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Mount Huangshan – A sustainable tourism development best practice in China

Jingming Cheng and Yuzhen Lv

Mount Huangshan is one of China's top tourist destinations, according to the National Tourism Attraction Guide Evaluation Committee. Known for its spectacular geological formations, beautiful scenery, cultural richness and sustainable management, Mount Huangshan carries the UNESCO titles of World Heritage Site, Global Geopark and Biosphere Reserve.

The 1 200 km^2 of Mount Huangshan are managed by the Mount Huangshan Scenic Area Administrative Committee (HSAC), which has been pioneering the management model of national parks in China since 1934.

Prior to the COVID-19 pandemic, more than 3 million tourists visited Mount Huangshan every year, generating more than CNY 300 million[36] (USD 47.1 million) from ticket revenue and resource usage fees annually. These funds are used for the park's protection and management.

The first management plan for Mount Huangshan, China's first designated scenic area, was developed in 1982. The first legislation for the protection and management of scenic areas nationwide followed in 1989, enacted by the People's Congress of Anhui Province. In 2005, the Mount Huangshan Scenic Area Master Plan was revised to incorporate the park's sustainable development. The aim of the plan was to balance scientific protection and sustainable development, focus on public education and the touristic experience, coordinate the relationship between the scenic area and surrounding areas, and promote the park's natural and cultural heritage. In 2021, the 14th Mount Huangshan Five-Year Plan for Economic and Social Development was formulated, addressing environmental sanitation, wastewater treatment, ecological protection, disaster prevention and mitigation, and forest fire prevention.

[36] USD 1 = CNY 6.44 CNY (www.xe.com/currencyconverter on 11 October 2021).

"From my own 22 years of experience and working on projects in 45 countries, Mount Huangshan in China is indeed a global model for sustainable destination development."

Brian Mullis,
Sustainable Travel International

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Based on scientific evaluation, the carrying capacity of Mount Huangshan has been identified. The ideal number of daily tourists is 35 000 visitors. The park's maximum capacity is set at 50 000 visitors. Closures are implemented on a rotational basis in the park's most frequented areas, with each closure lasting three to five years.

To manage Mount Huangshan's natural resources, forest resource inventories, biodiversity background investigations, bare rock desertification control and other activities are regularly performed, along with ecological monitoring (e.g. prevention and treatment of forest pests, soil recovery, exposed roots protection and fertilization). Thanks to these efforts, forest cover and vegetation cover rates of the site have increased from 56 percent and 71 percent in 1976, to the current 93 percent and 98.29 percent, respectively.

According to the latest background resource survey in 2019, the Huangshan district is extremely rich in biodiversity and hosts a variety of endemic species. There are 456 species of vertebrates, 244 species of birds and more than 2 385 species of vascular plants, accounting for 9 percent of the total number of species of Chinese flora and fauna. Thirty-four plants have the name *Huangshan* as their scientific or Chinese name.

Since 2008, HSAC has invested over USD 15 million in environmental protection facilities. All garbage is treated outside of the heritage site, and all sewage is discharged based on related standards. The site's total energy consumption is declining, as well as the per capita energy consumption. In 2017, Mount Huangshan was awarded the EarthCheck Silver Certification of Sustainable Tourism Destination (Earthcheck Benchmarking Assessment Report, 2017).

Digitalization and innovation are important to HSAC, which has invested over USD 40 million to build the first national information protection management intelligent dispatching system, covering five major systems involving resource protection, business management, tourism operations, public services, and decision assistance. On the mountain, HSAC launched an application that has greatly improved the accuracy of mountain rescues. Meanwhile, an intelligent system is being used to control visitor flows during peak periods. It monitors and forecasts tourist flows to help balance the distribution of tourists within the site.

Education and community engagement are fundamental to the park's sustainable development. The Mount Huangshan Scenic Area Administrative Committee promotes linkages between the mountain and the surrounding villages to build awareness of the need to protect the mountain environment and promote local social and economic development. The tourist education function of the heritage museum, geological museum, art gallery and tourist centre has been improved. Five thousand tour guides in Huangshan City have been trained in sustainable development, environmental protection, and communicating Mount Huangshan's rich natural and cultural heritage, and student visits to Mount Huangshan are regularly organized.

The Mount Huangshan Scenic Area Administrative Committee also supports and drives the development of tourism in the surrounding villages and towns, and gives priority to the employment of Huangshan residents. Cooperation

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between Mount Huangshan and its neighbours has been fostered steadily, with the aim of stepping up the area's mutual management based on an official agreement, whereby HSAC provides financial, technical and managerial support, tourism development and job opportunities to the local communities in the buffer zone, in exchange for their support and cooperation in forest fire and pinewood nematode control and compliance with the relevant HSAC regulations. An annual meeting between HSAC and representatives of the local communities is held to exchange views and discuss better cooperation.

According to the UNWTO, Mount Huangshan has taken the lead in forming a unique dualistic administrative mechanism in the management practice for China's scenic areas: the 160.6 km^2 unpopulated core scenic area of Mount Huangshan comes under the direct administration of the Huangshan Municipal Peoples Government, while the communities surrounding the core scenic area are governed by the Huangshan District Government.

Box 3. UNWTO International Network of Sustainable Tourism Observatories

The UNWTO International Network of Sustainable Tourism Observatories (INSTO) is a network of tourism observatories monitoring the economic, environmental and social impact of tourism at the destination level. The initiative is based on UNWTO's long-standing commitment to the sustainable and resilient growth of the sector through measurement and monitoring, supporting the evidence-based management of tourism. Mount Huangshan joined the network and became an observatory in 2010.

INSTO seeks to support and connect destinations that are committed to regular monitoring of economic, environmental and social impacts of tourism, to unlock the power of the evidence-based decision-making at the destination-level, fostering sustainable tourism practices locally and globally.

Further information on INSTO is available at insto.unwto.org.

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Mountain gorilla tourism: A true conservation success story

Mountain gorilla with an infant gorilla
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Johannes Refisch and James Byamukama

As the only great ape species increasing in numbers, the mountain gorilla's recovery is a conservation success story. Mountain gorilla tourism contributes to economic growth and conservation, and provides incentives for transboundary collaboration.

The greater Virunga landscape straddles the borders between the Democratic Republic of the Congo, Rwanda and Uganda, and is one of the most biodiverse regions in Africa. With rich tracts of tropical mountain forest, it harbours endemic species, such as the mountain gorilla, and other endangered species like the Eastern Chimpanzee (Plumptre *et al.,* 2007). The vast majority of mountain communities in the area live on subsistence farming and depend on rainfed agriculture. With some of the highest population densities in Africa, the region also suffers from high levels of poverty, and has undergone difficult periods of violent conflict.

Mountain gorilla habituation for tourism purposes first started in Rwanda in the 1980s and in Bwindi, Uganda, in 1991. In 2019, the last year before the COVID-19 pandemic, an average of 3 000 visitors per month came to the Bwindi Impenetrable Forest in Uganda, most of them to track gorillas (Greater Virunga Transboundary Collaboration Secretariat, (GVTC) *pers. communication*). When all habituated gorilla groups are fully booked, Rwanda earns USD 120 000 per day from the sale of gorilla tracking permits, with 10 percent of this income going to local communities.

The best indicator for sustainable tourism is the increase in the mountain gorilla population: the latest survey results reveal that the Bwindi gorilla population has increased from 400 to 459 individuals and that the Virunga

"The best indicator for sustainable tourism is the increase in the mountain gorilla population… As a result, the great ape's IUCN red list status has now been changed from 'Critically Endangered' to 'Endangered'."

population has increased from 480 to 604 over a five-year period, bringing the total mountain gorilla population to 1 063 in 2020 (Hickey *et al.,* 2020). In the 1990s, there were just 240 individuals left in the Virunga Mountains (with an unknown number in Bwindi). As a result, the great ape's International Union for Conservation of Nature (IUCN) red list status has now been changed from 'critically endangered' to 'endangered'.

Mountain gorilla tourism is an important contributor to the local and national economy. In Uganda, gorilla tourism constituted 97 percent of all the visitors to Bwindi Impenetrable National Park from 2017 to 2019, generating USD 66.23 million (pers. communication with the BINP Chief Warden). The Uganda Ministry of Tourism, Wildlife and Antiquities estimated having received USD 403 million from the leisure and hospitality industry, of which the direct sale of gorilla tracking permits constituted 6.7 percent (Ministry of Tourism, 2019). Locally, 20 percent of all gate fees and a USD 5 levy per gorilla permit is reserved as revenue sharing in Uganda, with 10 percent of all revenue in Rwanda.

Besides revenue sharing, the gorilla tourism packages create job opportunities, either directly or indirectly, through the hospitality industry and the sale of handicrafts and agricultural produce to the hotels and lodges. However, reconciling the demand for revenue from tourism with the needs of the gorillas is difficult. Strict rules to reduce the risk of disease transmission and further disturbance of the gorillas' natural behaviour is key. The Gorilla Friendly certification provides the opportunity for improving best practices even for existing excellent tour operations. At the same time, the certification can build capacity for a pro-poor approach, linking supply and demand for locally grown products in the tourism supply chain. Currently, the Gorilla Friendly Park Edge community product standards are under development, and products include honey and beekeeping, handicrafts, cultural performances, nature experiences and bird watching. The Gorilla Friendly programme is voluntary, and standards do not supersede national regulations. Funding for certification by the Wildlife Friendly Enterprise Network, in collaboration with the International Gorilla Conservation Progamme, has been secured by a number of donors.

Another positive effect of mountain gorilla tourism is that it has helped to improve the difficult relationship between the Democratic Republic of the Congo, Rwanda and Uganda. The three countries share tourism revenue when habituated gorilla groups cross international borders, meaning that 50 percent goes back to the country where the gorillas were originally habituated. Furthermore, the three countries have established the Greater Virunga Transboundary Collaboration Secretariat to tackle regional aspects, including tourism, law enforcement and monitoring of the gorilla population.

Although mountain gorilla tourism is a true conservation success story, the COVID-19 pandemic has also shown that over-dependency on revenue from tourism is a risk, and diversification of income for protected area authorities and communities is essential.

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Tourists on the search for mountain gorillas
©Johannes Refisch



Astrostays, Leh, Ladakh, India

Stargazing session for young villagers from Maan
©Astrostays

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Sonal Asgotraa

Astrotourism is a form of experiential tourism that encompasses travelling for astronomy-related experiences, ranging from nighttime stargazing in locations with access to dark skies, to observatories and special events like solar eclipses or meteor showers.

The best vantage points for these experiences are located in remote, mountainous and offbeat rural areas. Situated at an elevation of over 3 000 m, Ladakh is home to magnificent Himalayan peaks, rich Buddhist culture and, because of its altitude, incredible night skies.

In 2018, the International Astronomical Union – Office of Astronomy for Development and Global Himalayan Expedition developed 'astrostays', a community-led astrotourism model. Astrostays are homestays owned and operated by the community, which benefits directly from the revenue gained from the homestays and the stargazing sessions with tourists. Visitors can experience cultural heritage and exchange, local arts and crafts, indigenous folklore, local cuisine and more. The first astrostay was set up in the village of Maan (4 250 m elevation) in Ladakh, near the world famous Pangong Lake. Thirty women from 15 different villages were trained in the basics of astronomy and hospitality. A team of five trained community members from Maan now use their skills to conduct night sky viewing sessions for the incoming travellers, using a 25-cm telescope.

There are currently five operational astrostays. In the first four months of operations in 2019, these welcomed 450 national and international visitors, generating USD 1 410 for the community, which was reinvested to set up 10 solar water heaters and 15 greenhouses during the COVID-19 pandemic.

"A lot of tourists visit our area to see the famous Pangong Lake. However, they come mostly for day trips. Ever since we have introduced Astronomy in Village Maan, tourists are now staying overnight at our homestays, to experience the night star gazing sessions, which has helped to generate additional income for us. Tourists are now also visiting us in cold winters (when stargazing is at its best) which has helped to spread the impact of tourism year-round."

Tsering Dorjey,
29 year-old resident of Maan

Promotion of the astrostays was done through offline marketing, with brochures and pamphlets placed at most visitor information centres and signs set up at major visitor points around Pangong Lake. Online marketing was done through Booking.com, Airbnb.com and other online travel agencies.

As nature-based tourism emerges strongly in a post-COVID-19 world, astrotourism can offer social, economic and conservation benefits to remote rural mountain communities.

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An astronomer training 30 village women in Ladakh
©Astrostays



Empowering nomadic tribes in the Islamic Republic of Iran through ecotourism

Young members of nomadic migration
©Vincent Kronental

Yana Ashjaei and Sara Shokouhinia

The nomadic tribes of Iran historically reside in mountainous areas. Twice per year, they migrate across a mountain range for a particular season so that their cattle can graze. Mountain areas allow nomads freedom of movement and culture and provide cattle grazing opportunities away from infrastructure and private lands.

However, the remoteness of the nomadic tribes' communities and their unique lifestyle result in social exclusion and poverty. Young generations tend to abandon nomadism and settle for low-level unskilled jobs in cities, exacerbating their poverty and emptying mountains, while the whole ethnicity and culture gradually disappear.

Ecotourism can be a solution for nomadic peoples in Iran to keep living in the mountains while maintaining financial stability, preserving local culture, and managing the emerging tourism activities to conserve nature.

About 100 years ago, traditional nomadic tribes made up 40 percent of Iran's population. Today, they represent less than 2 percent of the population (ICCA Consortium, 2021).

IRANomad Tours, a company based in Tehran, has developed an ecotourism model that allows small groups (maximum four people) of responsible foreign travellers to join a nomadic family from the Bakhtiari tribe on its migration. This tribe moves between the provinces of Bakhtiari, Chaharmahal and Khuzestan in the Zagros Mountains in southwestern Iran. During the journey, tourists share food, chores and tents with the family.

"Creating new economic activities to diversify the economy would be a big help to preserve the nomads' cultural diversity. These activities should start in small doses, always maintaining pastoralism as the principal livelihood. Tourism related to hiking, alpinism, pony trekking, hunting and fishing can complement the nomadic lifestyle"

Jean-Pierre Digard,
Professor of Anthropology,
Sorbonne University

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Since 2018, 100 tours have been sold, amounting to 600 overnight stays by foreign tourists with nomadic families. The participants on the tours are generally experienced solo travellers between the ages of 25 and 35 from Europe, employed in sectors connected to anthropology, journalism or tourism. During the tours, sustainability principles are respected, including practising sensitivity towards local cultures and waste management.

The model promotes social inclusion. The close connection developed between the tourists and the nomads during the traditional migration raises the self-confidence of the nomads and shifts their self-perception from vulnerable and poverty-stricken to being valuable members of society.

Increasing tourism rates have sparked the ambition of nomadic youth to become certified tour guides. The current pilot group includes three teenage boys who are learning the job of being a tour guide and are studying English. They are involved in a nine-month training course to qualify for a local guide certificate issued by the Iranian Ministry of Tourism. They will receive 40 percent of the profit from tours, and the remaining 60 percent goes towards funding development projects in the area. The extra income families receive from tourism provides a safety net in case of drought or decreasing cattle sales.

In line with the local cultural tradition of establishing partnerships based on mutual trust, and because of the low literacy level of the nomadic partners, agreements are unwritten.

Sustainable tourism stays with nomads has led to the promotion of local crafts and organic mountain products. In 2020, nomads and villagers from Zagros started selling their products on the IRANomad platform. Currently 50 types of product, including wild herbs, honey, animal oil and handicrafts, are being sold on domestic markets as homemade goods. The production process – albeit without formal certification due to the high costs of certification – is entirely organic. The increasing sales will eventually lead to the establishment of locals' own online stores for them to sell their goods directly to buyers, omitting middlemen and ensuring a fair price for their work.

The project also aims to motivate locals to take control over tourism in the mountains so that it is adapted to their culture, and so that the biodiversity of the region is maintained. An example of recent biodiversity conservation efforts by local communities is the protection of a rare species of wild celery, *Kelussia odoratissima* Mozaff, which is endemic to the Zagros Mountains. Local residents stay in the pastures for several months to harvest the plants correctly and guard them against unskilled harvesters who could damage the resource base.

Another example of environmental protection includes an informal ban on throwing away any disposable plastic by tourists, including implementing 'hygiene bags', which tourists use to carry any disposable items until they reach a location with garbage pick-up.

The project has grown from one Bakhtiari family to 15 permanent partners. It has also expanded to the villages of Khoyeh and Sar Agha Seyed, and to

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the Qashqai and Maymand tribes. As there are still over 1 million traditional nomads facing social exclusion and poverty in the mountains, the IRANomad model can be applied to work with different tribes, with the proper adjustments according to the areas, by small dedicated teams or local non-governmental organizations to achieve incremental and sustainable development.

The future goal of the project is to engage nomadic communities in more parts of the business and provide them with capacity development opportunities. Training will cover tourism guide licensing, product certification, business registration and official documentation, as well as usage of online opportunities to grow businesses.

In due time, IRANomad Tours can become the platform and centre where nomads who become certified guides and producers can offer their customized tours and organic products directly to tourists and buyers. The quality of offerings will be monitored by the IRANomad Tours team, and support will be offered as needed to build a variety of small, self-sustainable, interconnected nomadic family businesses.



Map: *Location and migration route of the Mokhtari family of the Bakhtiari nomadic tribe in the Zagros Mountains between the Bakhtiari, Chaharmahal and Khuzestan provinces*

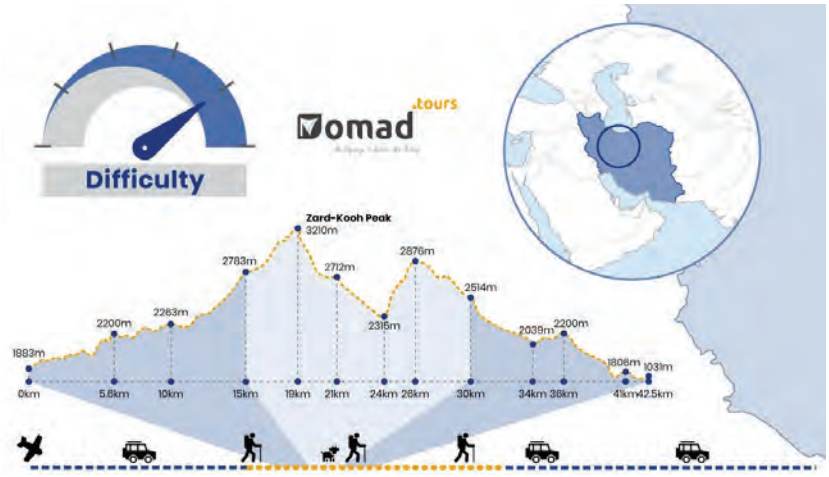

Chart of elevations passed on a standard tour with a Bakhtiari nomadic family. Note: the actual height of Zard Kooh Peak is 4 221 m, but the nomads usually move and stay at lower altitudes due to the presence of children and cattle.

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An Austrian tourist during a tour
©Martine Wijnstra

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Community-based tourism in Castelmezzano, southern Italy

Southern Italian mountains covered in snow
©Paolo Santarsiero/Unsplash

Emilio Cocco, Rita Salvatore and Anna F. Mines

Depopulated inner rural areas are in the midst of a transition towards territorial requalification processes related to the sustainable and responsible management of 'tourism-making'. One such case is the small village of Castelmezzano at the foot of the Dolomiti Lucane mountain range in the region of Basilicata in southern Italy. The village is located in the protected area of the Gallipoli Cognato Regional Park at 750 m above sea level.

Severely impacted by the 1980 Irpinia earthquake, Castelmezzano is now a picturesque hamlet. Most of its historical houses have been restored according to specific rules and a coherent landscape plan. While witnessing a 19 percent loss in population since 2001, the hospitality capacity of the village has grown tenfold in the same period.

The biggest draw to the area is the Volo dell'Angelo (the Angel Flight): an innovative, low-impact experiential tourism attraction whereby participants 'fly' on a zip line from Castelmezzano to the village of Pietrapertosa and back again. The attraction has contributed to the economic and cultural growth of the local population and has also been a driving force for other minor attractions, such as the Via Ferrata (fixed rope routes for climbers), Il Percorso delle Sette Pietre (the Path of the Seven Stones) and Il Ponte Nepalese (the Nepalese Bridge).

A new company that was established by the municipality of Castelmezzano in cooperation with private investors has hired 22 people, mostly youth, and the business has grown to reach an overall income of about EUR 650 000 (about USD 751 034) per year. These outcomes are slowing the trend of depopulation in the inner rural areas of Italy by providing decent employment directly to community members.

"Over the years, a micro-economy has grown and diffused in all of families in Castelmezzano. More than 40 B&Bs have been established, not to mention the restaurants, bars, etc. Every tourist could be a hypothetical client to a person. So, everyone respects everyone else, without competition. It is fantastic because people really feel at home here."

Pro Loco Administrator

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The active hiring of young people, requalification of institutional actors and business owners, and a willingness by locals to engage with tourists were all important factors that resulted in a shared, cohesive and communal identity that enhanced the tourism experience.

The experience of Castelmezzano is a replicable, successful community-based brand of tourism, with the management of the tourist services by the local residents. It valorizes endogenous assets, such as natural landscape beauty and historical, cultural, and geological heritage, and the involvement of community members in developing tourism.

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Southern Italian mountains
©Paolo Santarsiero/Unsplash



Promotion of responsible tourism in northern Italy: Associazione Naturavalp

Cows from the mountain pastures of Northern Italy
©Devis Venturini

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Daniele Pieiller and Francesca Bellotti

In the Valle d'Aosta (Aosta Valley) region of northern Italy, the *Associazione Naturavalp* (Naturavalp Association) is promoting the development of the mountain village of Valpelline through local entrepreneurship. It carries out economic, cultural, social and educational initiatives for responsible tourism development.

The Association – whose members and donors are mostly local people – strives to sensitize visitors to the importance of protecting the environment, using local products and visitors' relationship with the community to raise awareness of the cultural and biological value of the area. The members of the Association have been trained in sustainable practices, which often coincide with traditional customs, and in their area's own history.

Naturavalp opposes the development of tourism activities that are harmful to the environment, and supports those that respect the autonomy of the local population in the decision-making processes related to tourism. All commercial and accommodation activities related to the project are committed to using at least two products from the associated farms and to promoting the agricultural realities of the area.

The results of the activities of *Naturavalp* and the local municipalities show a constant increase in the number of tourists and of private investments in the area since the Association was established. In this time of crisis for the mountain valleys, where public services (such as scheduled buses and postal services) or essential services (availability of a petrol station) decrease every day, the interest of private investors and increased tourist presence represent encouraging signals for the mountains.

"In this time of crisis for the mountain valleys, where public services or essential services decrease every day, the interest of private investors and increased tourist presence represent encouraging signals for the mountains."

In the wake of the COVID-19 pandemic, the Association is creating spaces in accommodation facilities for smart working. Together with the municipal administrations, the best strategies to welcome newcomers who want to establish themselves in the mountains are being devised, including moments of interaction with local communities.



Mountain goat in Valpelline
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Monitoring the impacts of the COVID-19 pandemic on tourism – The case of South Tyrol, Italy

Train passing through the greenery of South Tyrol
©Alto Adige/Helmuth Rier

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Felix Windegger and Anna Scuttari

The Sustainable Tourism Observatory of South Tyrol (STOST) – part of part of the UNWTO's International Network of Sustainable Tourism Observatories (INSTO) – conducted three surveys in 2020 to understand the impacts of the COVID-19 pandemic on tourism in South Tyrol northern Italy. The surveys covered for local businesses in the tourism sector, guests and the local population.

The first survey was conducted in August 2020, more than two months after the lifting of travel restrictions. It revealed a high level of resilience and adaptive capacities by local businesses operating in the hospitality industry. Results indicated that more than 30 percent of respondents reported having adapted their products and services to the newly perceived needs of guests, as well as having intensified their marketing activities and their direct contacts with regular guests.

The second survey focused on how far the pandemic had changed the behaviour and needs of guests. More than eight out of ten respondents indicated spending time outdoors, avoiding crowds and emphasizing hygiene as their new priorities. They also indicated that COVID-19 had not changed their relationship with their host. The survey showed a shift towards using private vehicles, which could exacerbate problems connected to congestion during peak seasons.

The third survey explored how COVID-19 has affected the perception of tourism in the destination among the local population. For 77 percent of South Tyrolean households, the advantages of tourism outweigh the disadvantages. In a similar survey from 2018, this percentage was as high as 95 percent. This difference could be linked to the perception among local households that tourism had contributed to the increase in the number of COVID-19 cases in South Tyrol.

"Monitoring and reporting sustainability indicators in tourism is crucial for a responsible restart of the industry and for building it back better. The Sustainable Tourism Observatory of South Tyrol offers an insightful example of how monitoring activities can support evidence-based 'policy-making' at the regional level. "

The results of the three surveys have contributed to the development of a new vision for the sustainable future of tourism in South Tyrol by the Provincial Government in collaboration with the Center for Advanced Studies of Eurac Research. This vision, in line with the recommendations of UNWTO to "build back better", sees the crisis of international tourism as an opportunity.

Data are being used by the local destination management organization (DMO) to implement sustainability in tourism through various projects. Regional stakeholders are committed to continue supporting the work of the STOST, which plans to repeat all three surveys on a regular basis to keep track of future developments.

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A visitor enjoying the view of mount Nilgiri
©Community Homestay Network Pvt. Ltd.

Nepal: Trekking and beyond

Aadyaa Pandey, Bikal Khanal and Aayusha Prasain

The Community Homestay Network (CHN) in Nepal works with grassroots communities to develop attractive tourism experiences through a value-chain approach in rural areas with traditionally very limited or no tourism activities. Their community-based, impact-oriented business model helps to promote sustainable tourism. The community homestays are spread from the plains in the south to the Himalayas in the north.

Nepal's mountains and the surrounding natural environment are considered to be some of the world's most beautiful landscapes. The Himalayas attract travellers from around the world, and in some destinations over-tourism has become a problem (Dodds and Butler, 2019; Upadhayaya, 2018). The CHN addresses overcrowding and mass tourism by broadening the range of travel time in any given year and by offering alternative destinations for travellers.

Conventional tourism in Nepal focuses on popular destinations, such as Tatopani on the Annapurna Circuit Trail, and overlooks other nearby destinations. By developing alternative destinations, the environmental and social burden is taken off some of the more overcrowded tourism destinations while offering travellers an enriching community-based experience.

The Community Homestay Network started offering Narchyang as a destination in 2019. Before the COVID-19 pandemic, the homestays at Narchyang were able to host more than 50 travellers in their three months of operation.

In addition to supporting locals to promote their authentic culture and beautiful destination, participating in the CHN also amplifies their participation in the tourism sector. The Narchyang community homestay has given agency to the locals to manage their destination. Five individual homestay owners in

"I was almost about to move to Pokhara with my daughter and start a small business. Then the community members started discussing the possibilities of starting a homestay, and the prospect seemed encouraging by what we have seen at Tatopani for years. I decided to stay and use my three surplus rooms in my house to accommodate travellers."

Jhagmati Pun,
single mother and host in
Community Homestay Network

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Narchyang came together and registered their homestays under CHN. This empowered them to form a committee of individuals who are elected by the community homestay members. The committee works actively to prepare standardization guidelines, visitor allocations, developmental feedback and training, and necessary investments if provisioned. The leader of the committee has been actively engaging with relevant stakeholders from local and state governments to promote their culture and destination.

The model of community homestays helps the host families and also the overall community by stimulating the local economy. In addition to accommodation and meals, stays are designed to offer visitors the overall experience of living in the community and participate in their activities. Many community members who are unable to become hosts can be involved in the project as experienced service providers, ranging from cultural groups to local guides, and from local artisans to drivers. In a short span of time, the Narchyang community homestay has been able to directly support 5 families, 20 beneficiaries and has created 9 additional jobs such as community coordinator, local guide and cultural group outside the host families.

To overcome the language barrier between hosts and travellers, CHN has developed language training modules for the new communities. Also, CHN has been providing soft loans to support the community homestays in maintaining or upgrading their standard and to mitigate the cash flow difficulties that are common in these rural communities.

Enforcing sustainable practices in the local communities – regarding waste management, for example – can be challenging. Nevertheless, CHN has been training its homestay partners to implement sustainable practices such as providing clean purified water in reusable water bottles and limiting the number of plastic water bottles, one of the major sources of plastic pollution in Nepal. Homestays are encouraged to provide food with ingredients sourced locally.

Travelling healthily and safely is the major concern for visitors, especially when visiting rural communities and staying as a homestay guest. Together with its partners, CHN has formulated rigorous safety guidelines and training programmes to educate the communities in the network about COVID-19 and what precautions are needed to minimize the risk of spreading the virus, thus keeping guests and themselves safe.

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View from upper Narchyang, Narchyang
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Food and tourism for mountain development in the Philippines

Ulikan red rice terraces in the Phillipines
©Elena Aniere

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Elena Aniere and Federico Mattei

In 2018, the Mountain Partnership Secretariat together with Slow Food and the Philippines' Department of Tourism-Cordillera Administrative Region (DoT CAR) developed the pilot initiative "Food and tourism for mountain development" to tap the potential of local food systems as drivers of sustainable tourism. The goal was to promote a sustainable tourism model based on connections among small-scale farmers, cooperatives and businesses and on raising awareness among visitors and consumers about the importance of conserving biodiversity, agrobiodiversity, cultural heritage and local gastronomy.

The Cordillera mountain range contains the highest and largest mass of mountains in the Philippines, covering about 16 percent of the country's total land area. Seventy-one percent of this land area is characterized by steep slopes and high elevations (500 to 2 000 m above sea level), with limited areas available for agriculture and settlements.

The Cordillera Administrative Region (CAR) is one of the poorest and most marginalized regions in the country, especially its farmers and fisherfolks. The region is rich in agrobiodiversity and has distinct indigenous cultures that differ from the rest of the country. Five Ifugao Rice Terrace sites are inscribed in the UNESCO List of World Heritage in Danger.

Local, unique and biodiverse products and their gastronomy are at the heart of the "Food and tourism for mountain development" project, connecting local stakeholders including smallholder producers, artisans, agritourism providers, homestays, restaurants, coffee shops and food outlets.

The Slow Food mapping methodology was used to identify local products (such as raw materials, varieties, animal breeds, processed products, traditional

Paolo di Croce, Slow Food Secretary General: "This collaboration shows how the global development community can seek to successfully leverage sustainable tourism in the drive to strengthen the sustainability of food systems and protect agricultural biodiversity, while providing alternative but crucial livelihood strategies to smallholder farmers and food value chain actors at a local, regional and global level."

techniques and recipes) in the area, highlight existing agricultural and food heritage, and to use these as an incentive for local development strategies. Activities included:

- desktop research, product nomination and site assessments;
- dialogue with the farmers and producers to gain a better understanding of the cultural and traditional connection between product, people and place;
- product tastings for organoleptic quality, as defined by local uses and traditions;
- product and production value chain analysis; and
- training for local farmers, processors and chefs, focusing on traditional agro-ecological practices and production protocols to maintain product quality; value chain improvement; and consistent production of high-quality products.

As a result of the mapping methodology, 36 products were nominated to be part of the Mountain Partnership Products (MPP) initiative, from which two products – Itogon Arabica Coffee from Itogon, Benguet, and Ulikan Red Rice from Pasil, Kalinga – were selected. Two MPP narrative labels were developed for these products, which were launched at World Food Expo Manila in August 2019 and promoted at Terra Madre Salone del Gusto 2020. Ten chefs and cooks became the protagonists of the project, and this work continues with DoT CAR. Over 100 relevant local tourism value chain stakeholders were identified and mapped.

Slow Food Cooks Alliance

Chefs and cooks are undoubtedly in the best position to find the best quality local produce, favouring the 'biodiversity guardians' – the small-scale growers, artisan producers and processors. A cooks' network is crucial to safeguard local agrifood heritage and expertise, by paying fair prices to small-scale local producers and by promoting products that are at risk of disappearing, allowing consumers to (re)discover these products by way of exceptional tasting experiences.

The project faces certain challenges. The history of foreign colonization and occupation in the Philippines has contributed to the perception of western foods and culture as superior to local ones. Exposure through events, media, awareness-raising activities and involving chefs can help to change this perception. While the project aims to include indigenous communities, only the indigenous peoples who were willing to participate were involved. Additionally, only communities that could be visited within certain time frames and be suitable for food tourism experiences were selected. Some communities not accessible or ready for tourism may still be able to provide local heritage produce to local chefs to increase the income stream. Finally, traceability of food and production is not common in the Philippines, so the MPP narrative label is helping consumers to understand who produces the food and where it comes from.

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Food fairs and events

Food fairs and events are an effective and engaging way to bring producers and visitors together. They also demonstrate a short and transparent value chain while raising awareness of where the food comes from and who grows it, plus ensuring that the producers are paid a fair price for their products.

Improving livelihoods in mountains

The Mountain Partnership Products (MPP) Initiative promotes sustainable food systems, agrobiodiversity conservation, and strengthening of value chains in mountain regions. To date, around 10 000 farmers – 6 000 of whom are women – have benefited from technical and marketing support. In addition, the initiative's labelling scheme has helped some mountain producers to increase their selling price by up to 25 percent.

Conclusions

The Cordillera indigenous peoples possess an extraordinary food patrimony that could be the pride and joy of the Cordillera and the Philippines, as are the Ifugao Rice Terraces. It will be necessary for partners and other government agencies to continue working with farming communities and local stakeholders to ensure that this food and tourism model becomes a reality.

Agriculture is a main driver of rural development and can help to ensure the sustainable management of cultural landscapes; however, ensuring the profitability of smallholder farming is difficult. Additional income from secondary activities is necessary to meet investment and other costs. Sustainable food tourism is a promising option.

Note: All content, structure, and images were appropriately presented in the materials throughout the project. Additionally, free, prior and informed consent (FPIC) processes were observed for indigenous peoples' awareness of their contributions, commitments, and rights in the project.

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Joining forces for a greener future: Alpine tourist destinations in Rogla-Pohorje, Slovenia

View from Pohorje Treetop
©Aleksandra Golob

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Aleksandra Golob

Oplotnica, Slovenske Konjice, Vitanje and Zreče are four mountain municipalities in the Slovenian Alps. Each has operated separately historically, taking the development of tourism in its own individual direction. Local tourism stakeholders wondered how to encourage tourists to visit less-frequented municipalities and how to bring visitors away from crowded areas. Their goal was to ensure a more balanced distribution of tourists and to provide the local population with opportunities to earn additional income.

The adoption of the 2017–2021 Rogla-Pohorje Destination Tourism Development and Marketing Plan provided a framework for the four municipalities to collaborate and created a joint brand for the Rogla-Pohorje Tourist Destination (RPTD). The plan follows the triple bottom line model, combining the environmental, economic and social aspects of tourism development.

The RPTD brought the communities together to systematically plan their mountain area's sustainable development and market their touristic offerings. Outcomes included joint promotional activities, development projects, the creation of the Tastes of Rogla brand, training opportunities for providers, joint tourist packages, a joint discount card, a joint website including a booking system and online store, a complimentary summer bus route throughout RPTD and free guides for RPTD visitors.

As the proud holder of the national 'Slovenia Green Destination gold label' certification,[37] the RPTD is dedicating its resources to ensuring the health and safety of the local population and its visitors, and the systematic, sustainable

"Organizing the development of tourism under the brand of the Rogla-Pohorje Tourist Destination will result in long-term effects for everyone involved. This allows the destination to gain business opportunities that it otherwise wouldn't, as the process of bringing together makes it more attractive for many local and foreign investors."

[37] For further information, see https://www.slovenia.info/en/business/green-scheme-of-slovenian-tourism

and socially responsible development of local tourism.

The sustainable development of the overall RPTD

TASTES OF ROGLA BRAND

- The Tastes of Rogla is a brand that brings together and preserves the culinary tradition of the Rogla-Pohorje Destination, thus preserving authentic culinary elements that are passed on from generation to generation and preparing them in accordance with modern-day healthy diet trends.
- Number of certified products under the brand: 239
  - 124 food products with the quality designation (e.g. jams, teas, handmade pasta, fruit bread)
  - 37 traditional dishes (e.g. Pohorje Pot, mushroom soup, flower soup, Mountain River rustic cake)
  - 62 handicrafts and unique and industrial design products (e.g. handmade products made wood, wool and metal)
  - 15 guided tourist experiences
  - One culinary event (Pohorje Pot Feast)
- Number of certified providers: 38

More information is available in the *Tastes of Rogla* brochure: https://www.rogla-pohorje.si/mma_bin.php?id=2020082815305437.







1. Wild deer roaming on a mountain farm
2. Overview of the brand and taste of Rogla's products
3. Cyclist biking in Rogla- Pohorje, Slovenia
©Aleksandra Golob

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The 100-year-old Berghotel Alpenblick hotel in Tenna
©Daniel Tanner

A mountain hotel as a driving force for innovation and sustainable development, Switzerland

Rebecca Göpfert

In 2019, a regional development project[38] was initiated in the Safien Valley under the state support programme for the agricultural sector, focusing on regional development and cross-industry cooperation. Through sustainable tourism, the Safien Valley in the Grisons canton of Switzerland aims to position itself as a model region for sustainable development. The initiative will provide long-term security for existing jobs as well as create new ones.

The Hotel Alpenblick in Tenna serves as a hub for this initiative. For over 100 years, it has been the place where people from the valley meet and where events and dialogues with guests from near and far occur. The hotel will function as a central pillar, a driving force for innovation and a hub for a flourishing regional economy.

An Alpine FoodLab will be set up in the hotel to promote product innovation in Alpine agriculture. In addition to traditional products such as cheese and meat, new products and those from other cultures will be tested or revived, such as mountain potatoes, quinoa and stevia. To create incentives for these experimentations in the fields, meadows, pastures and stables of the mountain farms, agriculture, research and development will be brought together in the Innovation and Competence Centre for Alpine and Mountain Agriculture, to enable sustainable, profitable agriculture in mountain areas. The exchange of knowledge with practice is to be strengthened, and practical questions on specific, location-related problems of interest to the whole of Switzerland will be answered.

It is a great pleasure to work in a valley where there is a lot of room for creative and innovative projects that are implemented with a lot of passion and commitment."

Jolanda Rechsteiner,
Managing Director, Safien Valley Tourism

[38] For further information, see https://www.blw.admin.ch/blw/de/home/instrumente/laendliche-entwicklung-und-strukturverbesserungen/laendliche-entwicklung.html

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The project is initiated from the 'bottom up' and is supported by the entire population. All stakeholders, locals and part-time residents are aware that perseverance and consistency are needed to guide the valley towards a prosperous, sustainable future. Government funding is an important provider of finance and thus an enabler, especially in the planning and initial phase. The success of such projects will depend on additional donors and supporters.

Mountain regions can only be conserved and further developed if local economic and cultural initiatives are developed and widely supported. In doing so, the focus is deliberately set on the interaction between local and national activities. This interaction creates a sense of belonging to one's homeland and cosmopolitanism, tradition and innovation, tranquility and inspiration. It is from here that approaches for sustainable development and for the long-term conservation of a unique mountain valley like the Safien Valley emerge.



The "land version" of "Null Stern Hotel"
©Atelier für Sonderaufgaben, Art Safiental 2016

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Destination Dahar©: Mountain, sea and desert – The new tourism in Tunisia

Tourists in Dahar
©Swisscontact

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Ministry of Tourism

The mountainous region of Jebel Dahar is a 6 300 km² mountain chain located in the southeast of Tunisia. Dahar is a land of travellers and hikers in search of authenticity off the beaten track. The region offers exceptional landscapes, historic Berber citadels carved into the steep mountains, troglodyte caves, and 3 000 years of encounters between civilizations.

Since 2018, Dahar has become the first regional tourist destination in Tunisia organized by the Destination Management Organization (DMO), with the ambition of proposing a nature and culture offer and diversifying Tunisian tourism.

The Destination Dahar© brand was registered in 2016 to highlight the region's touristic offer. Although equipped with good infrastructure and full of potential, the region – one of the poorest in Tunisia – has never been the subject of tourism promotion. Tourism in Tunisia is concentrated on seaside and Saharan offerings. Since the 1960s, Dahar has been crossed by passing tourist groups, providing neither overnight stays nor income for the populations.

In the early 2000s three providers started to offer accommodation in the troglodyte caves that are typical of the region. Dozens of guesthouses of varying quality followed in the early 2010s. This paused after the 2011 revolution and the 2015 terrorist attacks. Since then, the region has developed its own tourism model, becoming a benchmark for other regions in Tunisia.

Since 2015, with the support of the Ministry of Tourism, the Tunisian Tourist Office (ONTT), the Swiss State Secretariat for Economic Affairs (SECO) and Swisscontact, Dahar organized itself into a DMO in March 2018, bringing

together 95 percent of the tourism providers in the region in a public-private partnership with ONTT.

This development has made it possible to:

- create a regional tourist identity, 'compatible with the tourism desired by service. by service providers and the population;
- develop a brand and marketing concept focused on nature-culture tourism, hiking and geotourism;[39]
- develop innovative tourism products, such as the first *topo-guide* (climbing guidebook) of Tunisia;
- develop promotional materials and mobilize professionals and influencers;
- bring together providers from a region spread over the governorates, bringing them closer to the tourist authorities; and
- legally register 26 providers.

As of today, many existing providers have been upgraded. Ten new accommodation units have been created, to which around 20 new ongoing requests have been added. One hundred percent of jobs have been maintained, and 50 jobs have been created. As of 2018, Dahar was considered to be the only region of Tunisia fully functioning nine months out of the year. About 70 percent of visitors to the region are from Tunisia.

The performance indicators developed for the project show that it has achieved its expected results. Indicators included:

- the number of direct and indirect jobs resulting from tourism in Dahar is maintained, and at least 80 percent of Dahar's accommodation and catering providers are still active at the end of the programme despite the tourism crisis in Tunisia;
- 100 percent of DMO members exercise their activity legally;
- a local DMO based on public-private partnership, including at least 50 percent of all accommodations and catering providers and at least four owned by women, is functional on the basis of sustainable business a model recognized by ONTT;
- the destination or DMO has improved tourism products, and quality promotional materials are made available; and
- the project generates synergies between actors and facilitates institutional dialogue at regional and national level in favour of the development of alternative tourism in Tunisia, in particular between tourism providers, the private sector and authorities.

[39] Dahar has six geosites of universal value (https://geotourisme- dahar.com/).

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The Dahar pilot experience is a flagship example of a new approach to marketing and the positioning of a destination, using new marketing tools, and regional governance of tourism. Based on this experience, SECO has funded another project in the southeast of Tunisia and at national level. The project is part of an inclusive and territorial development logic and offers a base of local experiences that will be disseminated at national level and in an institutional framework.

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The Roaring Fork & Farm Map: Agritourism in Colorado, United States of America

Haying at Sustainable Settings farm, Carbondale
©Sustainable Settings

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Rachel Forbes and Sarah-Jane Johnson

Carbondale is a small rural community situated at 1 884 m elevation with a population of approximately 6 000, known as a bedroom community to the ski resort of Aspen 48 km away. This town was founded as an agricultural hub to supply food to the mining communities located at higher elevations during the silver mining boom of the 1880s and has always lived in the shadow of its internationally recognized neighbour.

Yet as travel trends change, there has become an increasing interest in local food and deeper connections to the land, and Carbondale has been well positioned to capitalize on this. Since 2012, the state of Colorado's tourism office has supported the development and promotion of agritourism, with a programme of destination development that evolved in 2018 to launch the rural tourism training academy 'CRAFT'.

According to the Colorado Department of Agriculture, between 2012 and 2017, the number of Colorado farms generating income from agritourism and recreational services grew from 864 to 1 056, and the income almost doubled, from USD 32 000 to USD 60 000 per farm (Source: Colorado Department of Agriculture Ag Census, 2017). Locally, tourism is coordinated by a volunteer board and overseen by the Carbondale Chamber of Commerce.

This small DMO's operations are funded by a 2 percent lodging tax mandated by voters in 2007, and income provides an operating budget of just over USD 100 000 to support marketing and now a focus on destination management initiatives. Carbondale Tourism has cultivated its tourism focus around agritourism, creative arts tourism and rural outdoor recreation. Carbondale's agricultural history is the starting point of any story about the destination,

"travellers want to understand more about the food on their plate or the beverage in their glass, and Carbondale is rich with authentic ways to connect to the land – whether it's enjoying a cocktail made from locally grown grains, dining on vegetables from local gardens, or even being up-close with cattle on a ranch visit. As the local destination management organization, our goal is to continue to encourage our local farmers and ranchers to grow visitor and tourism offerings, as a means to diversify their business that is also very much appealing to Colorado travellers,"

Sarah-Jane Johnson,
Carbondale Tourism

which comes full circle as a new generation of younger farmers have established micro-farming initiatives.

The Roaring Fork & Farm Map is a printed pocket guide to Carbondale's agritourism that includes guest ranches, public gardens and farms, visitor attractions, and experiences, along with restaurants and retailers that were identified as specifically supporting the local food movement through menu items or connections with local farmers. The map describes the heritage of agriculture to visitors.

Carbondale's history has long been rooted in the production of quality, local food. Beginning with the indigenous Ute people who hunted the fertile lands, later in the 1880s settlers began to harvest the land, supplying regional mining communities with beef, potatoes and grains. At that time, the Roaring Fork Valley produced more potatoes than the entire state of Idaho. Today, Carbondale's unique ranching and farming legacy continues to thrive.

This 'gastro-renaissance' is driven by young farmers and ranchers who are carving out boutique and micro-farming projects while developing relationships with custom-grow chefs, brewers and distillers resulting in unique flavours from the local terroir, while minimizing the distance food travels from farm to fork.

The map guide highlights include:

- **farm-to-table eats:** a listing of food and dining options that specifically emphasize local flavours and produce;
- **local libations:** this section includes highlights of Carbondale's unique locally produced beverage scene;
- **public gardens:** Carbondale has an array of public parks and gardens that showcase edible plants and produce;
- **farms and ranches with visitor experiences**; and
- **additional farms and ranches:** visitors can enjoy produce and meat from many farmers and producers who supply many regional restaurants and retailers. The true breadth of Carbondale's ranching culture is also highlighted in the map guide and modern-day Carbondale ranches are the setting for event venues and healing centres.

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Volunteers Help Restore Gore Creek in Vail
©Michael Eldridge

Vail, Colorado, United States of America: Becoming Mountain IDEAL

Kimberly Langmaid

Vail, Colorado is a 292 km² mountain tourism destination defined by the boundaries of the Gore Creek watershed. Elevations range from 4 139 m at the top of Mount Powell to 2 353 m at the confluence of Gore Creek and the Eagle River. Lands within the destination are managed by the Town of Vail, the state of Colorado, Eagle County, the United States Forest Service and Vail Resorts Inc. This multi-jurisdiction mountain multiplicity is home to approximately 5 500 year-round residents, 5 000 part-time residents, and hosts an estimated 1.5 million annual visitors. The destination is also home to mountain species such as bighorn sheep, mountain goat, pika, marmot, ptarmigan and Canada lynx. Known as the home of one of North America's largest ski resorts, Vail has become a year-round destination sought for its outdoor recreation, and educational and cultural enrichment opportunities.

The Vail community has strived to maintain the natural and cultural heritage of the destination while increasing visitation and economic development. In 1980 a 1 percent Real Estate Transfer Tax (RETT) was established to support the purchase of open space and recreational parks. In 2006 RETT purposes expanded to included environmental sustainability programmes. The average annual RETT for the past ten years has been USD 5.7 million. This funding has been a key component within Vail's evolving sustainable tourism assemblage. Several examples of how these funds are used to support sustainable tourism include: watershed restoration and protection, waste and recycling programmes, climate change adaptation strategies, wildfire mitigation, wildlife habitat protection, trail ambassador programmes, acquisition of open spaces, recreational park facilities, and the process of sustainable destination management and certification to the Mountain IDEAL (MI) standard.

"Vail has become a year-round destination sought for its outdoor recreation, and educational and cultural enrichment opportunities."

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The Mountain IDEAL standard consists of 44 criteria and 72 indicators. The criteria are organized into four categories: sustainable tourism management and monitoring; destination planning and asset protection (including climate change adaptation); community engagement, culture and social equity; and environmental resources. In advance of Vail's audit to become certified both qualitative and quantitative evidence of indicators was organized into a destination sustainability management system. An on-site audit included site visits and interviews.

Two examples of criteria required for MI certification include: A1.1) The destination has an effective organization, department, group or committee responsible for a coordinated approach to sustainable tourism. This organization has defined responsibilities for the management of environmental, economic, social, cultural heritage, aesthetic, quality, health, safety and human rights issues; and B3.1) The destination has a system to monitor the impact of tourism on sensitive environments such as wilderness trails, mountain rivers, lakes, creeks, streams, and protect habitats and plant and animal species.

Three examples of indicators required for certification include: B4.2.1) Percentage of businesses that undertake climate change mitigation, greenhouse gas reduction and adaptation responses and actions; and C3.3.2) Percentage of tourism workforce that is housed locally; and D2.3.2) Amount of water consumed per annum by travel and tourism enterprises per visitor night.

Lessons learned through the MI certification and destination management process include:

- the importance of a collaborative destination stewardship council and steering committee to address cross-boundary challenges and develop creative solutions;

- the significant effort required to maintain, celebrate and elevate cultural heritage through the development of a new Cultural Heritage Committee;

- the importance of providing the Actively Green sustainable business training and certification programme to train small- and medium-sized enterprises in sustainable tourism good practices and recognize their success through an annual awards celebration; and

- the critical importance of having a process to guide the destination's sustainable tourism management planning process to help guide Vail's future.

The Vail Destination Steering Committee continues to gather on a semi-annual basis to follow up on criteria and indicators and review a register of risks and emerging considerations. Subcommittees actively address issues and maintain continuous improvement. The ongoing nature of this work – the various actors and sectors involved, the dynamic nature of challenges and adaptive management, all within a changing global climate – highlight the significance of assemblage thinking within sustainable mountain tourism.

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Karakul lake, Tajikistan
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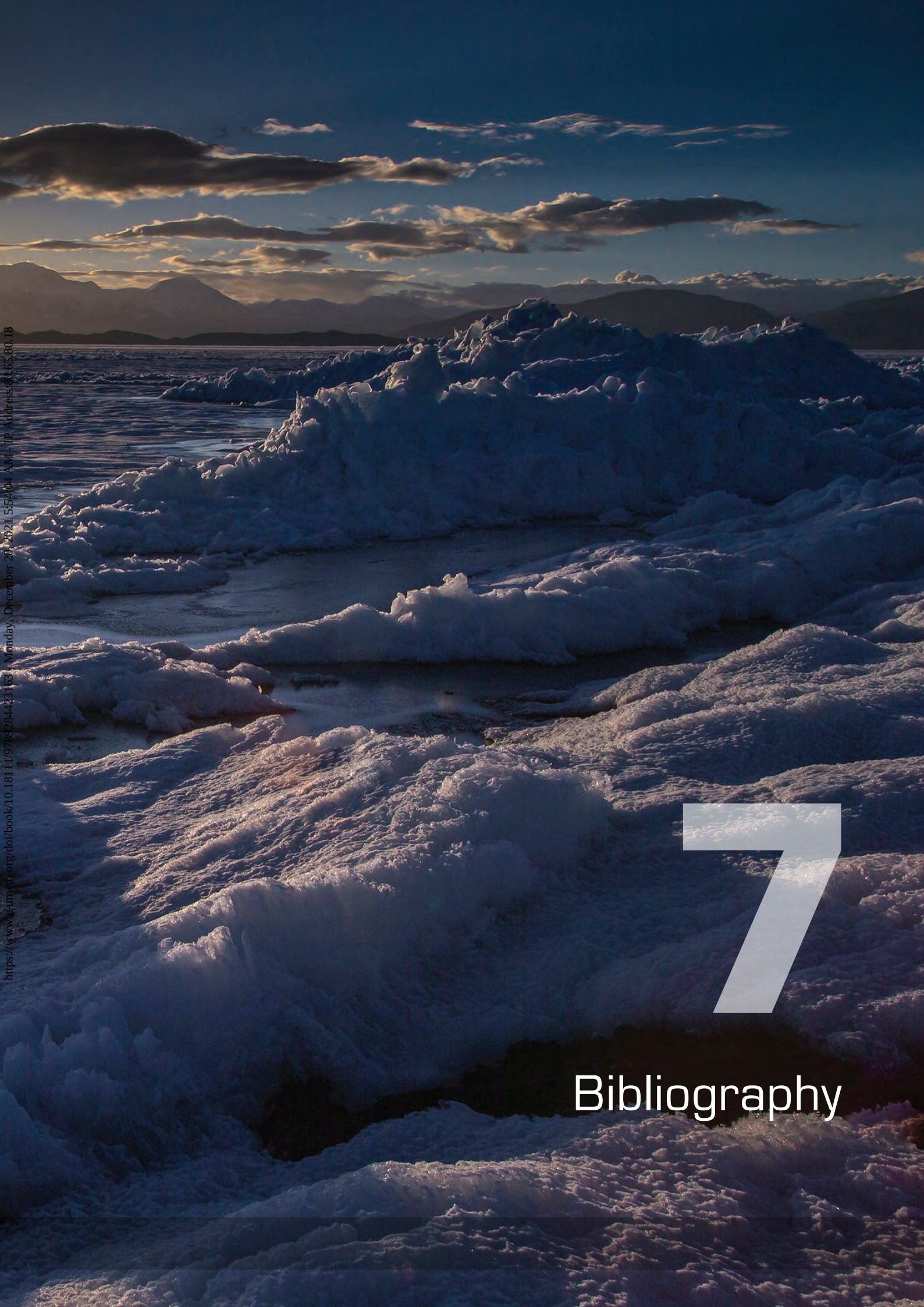

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7

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Annex 1 Authors of case studies

Tourists looking at the mountains of Mae Hong Son, Thailand
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Mountaineering villages for sustainable Alpine tourism

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The Central Andes and sustainable development: The Mendoza High Mountains Strategic Plan, Argentina

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Climate change adaptation for ski resort destinations – Mount Baw Baw, Australia

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Carpathian tourism – Training local entrepreneurs

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Mountain Tourism Impulse Plan: Chile looks to the Andes

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Mount Huangshan – A sustainable tourism development best practice in China

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Mountain gorilla tourism: A true conservation success story

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Empowering nomadic tribes in the Islamic Republic of Iran through ecotourism

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Community-based tourism in Castelmezzano, southern Italy

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Promotion of responsible tourism in northern Italy: Associazione Naturavalp

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Monitoring the impacts of the COVID-19 pandemic on tourism – The case of South Tyrol, Italy

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Nepal: Trekking and beyond

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Food and tourism for mountain development in the Philippines

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Joining forces for a greener future: Alpine tourist destinations in Rogla-Pohorje, Slovenia

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A mountain hotel as a driving force for innovation and sustainable development, Switzerland

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Destination Dahar©: Mountain, sea and desert – The new tourism in Tunisia

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The Roaring Fork & Farm Map: Agritourism in Colorado, United States of America

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Vail, Colorado, United States of America: Becoming Mountain IDEAL

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With their soaring peaks, remote locations and majestic beauty, mountains have long been a powerful attraction for visitors from all walks of life, who are drawn by the often colourful traditions of local communities, the opportunities for sporting activities, and the spiritual solace to be found in highland landscapes.

This study highlights the important role that tourism can play in valuing the natural and spiritual heritage of mountains, and the cultural diversity and traditional practices of mountain peoples. Particularly when linked to nature and rural tourism, mountain tourism can make a valuable contribution to promoting sustainable food systems and adding value to local products.

Developing sustainable tourism in mountains requires reducing its negative environmental and social impacts and addressing the challenges posed by climate change. The COVID-19 pandemic has already brought about major changes in the mountain tourism sector and substantial losses for communities and businesses. However, consumer appetites for destinations that are outdoors and less crowded have increased in the wake of the pandemic, and these changes usher in new opportunities for mountain destinations to rebuild a greener and more sustainable form of tourism and rethink their products and services.

For this to happen, the following measures will be critical: innovation and development of year-round tourism experiences; investments in infrastructure, particularly for the digitalization of mountain tourism services; strengthening multi-level-governance, partnerships and active community participation; and ensuring regular assessments of the impact of tourism on mountains, the effective management of waste and resources, and clearer practices for defining and managing the carrying capacity of highland destinations.

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