

Tourism in Mountain Regions

Hopes, Fears and Realities

Sustainable Mountain
Development Series

Sustainable Mountain Development Series

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Hopes, Fears and Realities

2014

Published by
the Department of Geography and Environment, University of Geneva,
the Centre for Development and Environment, University of Bern,
and the United Nations Environment Program

This publication was supported by the Austrian Development Cooperation,
and the Swiss Agency for Development and Cooperation

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ISBN 978-2-88903-027-9 (print)

E-ISBN 978-2-88903-028-6 (PDF)

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Citation:

Debarbieux B, Oiry Varacca M, Rudaz G, Maselli D, Kohler T, Jurek M (eds.). 2014. Tourism in Mountain Regions: Hopes, Fears and Realities. Sustainable Mountain Development Series. Geneva, Switzerland: UNIGE, CDE, SDC, pp. 108

Electronic version can be downloaded from:

www.geo.unige.ch

www.cde.unibe.ch

www.entwicklung.at

www.sdc.admin.ch

www.unep.org

www.mountainpartnership.org

Cover photo: Aiguille du Midi, France, 2011 (P. Smith: patrick-smith-photography.com).

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Foreword

The economic potential tourism holds, for many – although not all - mountain communities, is quite clear: in most mountainous regions of the world, people have limited possibilities for generating income. Agriculture, forestry and animal husbandry form the backbone of local economies, but these contend with shallow soils, harsh weather conditions, and low market competitiveness. Therefore, diversification of livelihoods is often not a choice, but a necessity for mountain households.

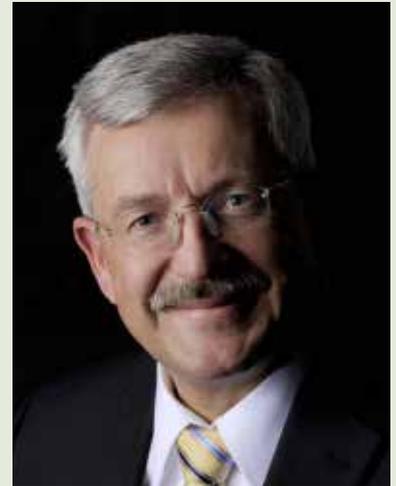
Mountain ranges offer possibilities to all kinds of tourists: sport fans come for hiking, climbing or skiing. Others come simply to appreciate beautiful landscapes. In remote valleys and on mountain peaks, many endemic plants invite visitors to discover unique biodiversity. Those interested in cultural heritage find compelling destinations along Andean Inca trails, in the rock churches of Ethiopia, or at sacred Buddhist sites and ceremonies in the Himalayas.

On the other hand, tourism carries risks of harming ecological goods and services, compromising cultural identities, and increasing social inequalities. Tourism is not a “one size fits all” solution, as there are various factors and conditions that need be considered if tourism development is to be a lasting success. These range from favourable weather to reliable transportation infrastructure, from diverse and high quality services to social and political stability, and include minimal administrative requirements, such as means for issuing visas and other permits.

Switzerland and Austria have both experienced the bright as well as the dark sides of tourism. This is why the decision was made to jointly finance a publication that addresses and explores the key issues and opportunities of sustainable mountain tourism at a global scale.

This brochure sheds light on mountain tourism by focusing on the economic, ecological and social dimensions which constitute the pillars for sustainable development. In seeking paths toward sustainable mountain tourism, the text explores important case studies from all over the world which suggest both attractive examples and mistakes to avoid.

Our hope is that this publication will inspire both policy makers and practitioners to move towards sustainable tourism development in mountain regions, benefiting local communities while inspiring visitors from around the world.



Ambassador Martin Dahinden
Director General SDC



Dr. Martin Ledolter, LL.M.
Managing Director of ADA

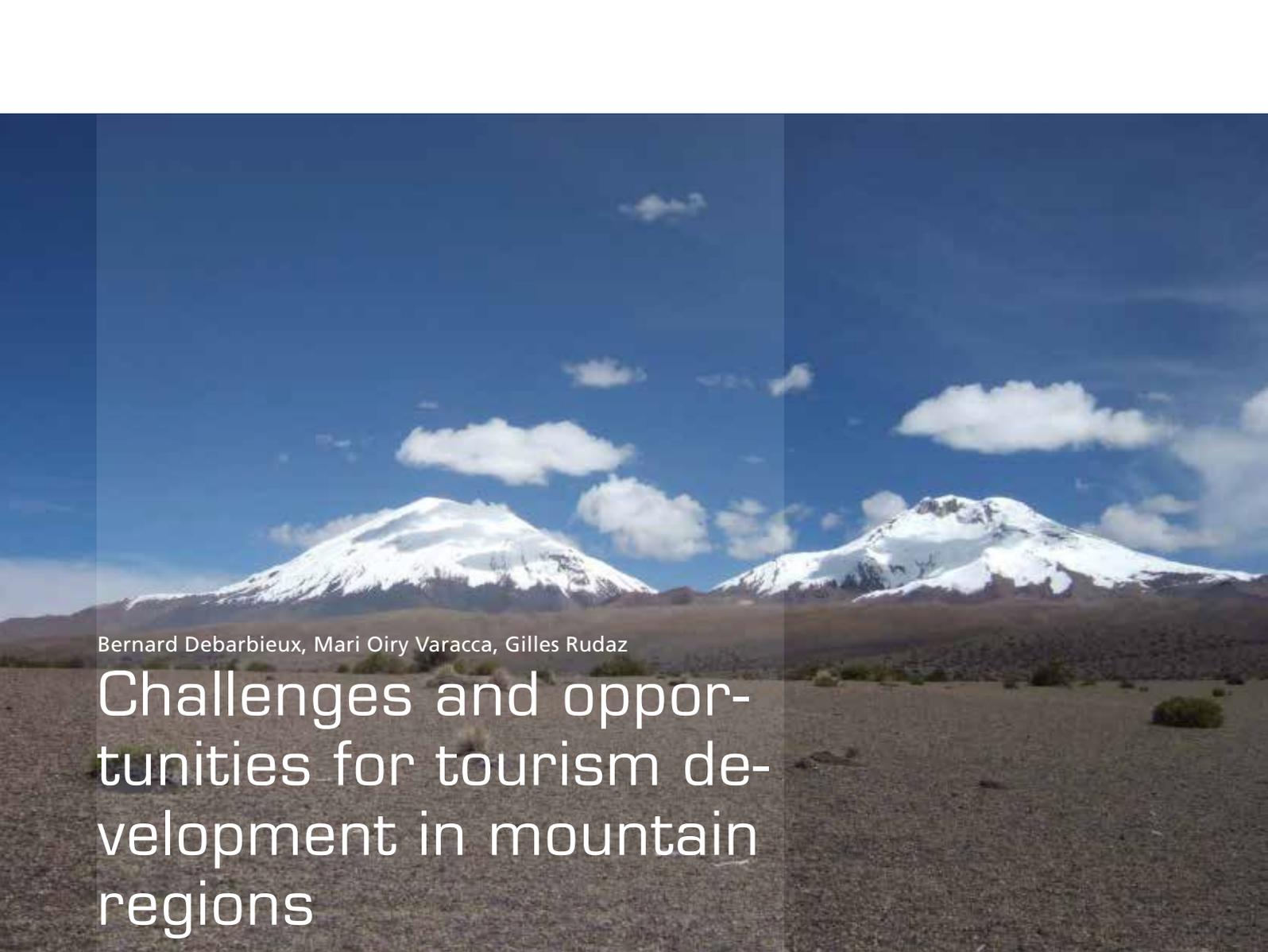
Ambassador Martin Dahinden

Dr. Martin Ledolter





Challenges and opportunities for tourism development in mountain regions



Bernard Debarbieux, Mari Oiry Varacca, Gilles Rudaz

Challenges and opportunities for tourism development in mountain regions

Parinacota and Pomerape volcanoes, Sajama National Park, Bolivia, 2011 (L. Lerch, Geneva University)

Each year, the influence of tourism is increasingly felt across the globe. Of all the sectors of the world economy, tourism registers one of the strongest and most consistent rates of growth, and in 2012, for the first time, the number of international tourists exceeded one billion (UNWTO, 2013). Domestic tourism – where individuals travel within their own country – has long existed as a leisure activity in richer countries, or in the form of pilgrimages, throughout the world. Today, however, there is an explosion of leisure tourism in developing countries, demonstrating that many societies in the world are continuing to adopt this practice. The development of tourism infrastructure is also proceeding rapidly in the form of resorts, rural inns and guesthouses, and major outdoor recreational facilities (amusement parks, ski areas, etc.), but also on smaller scales such as local museums, hiking routes and mountain bike trails.

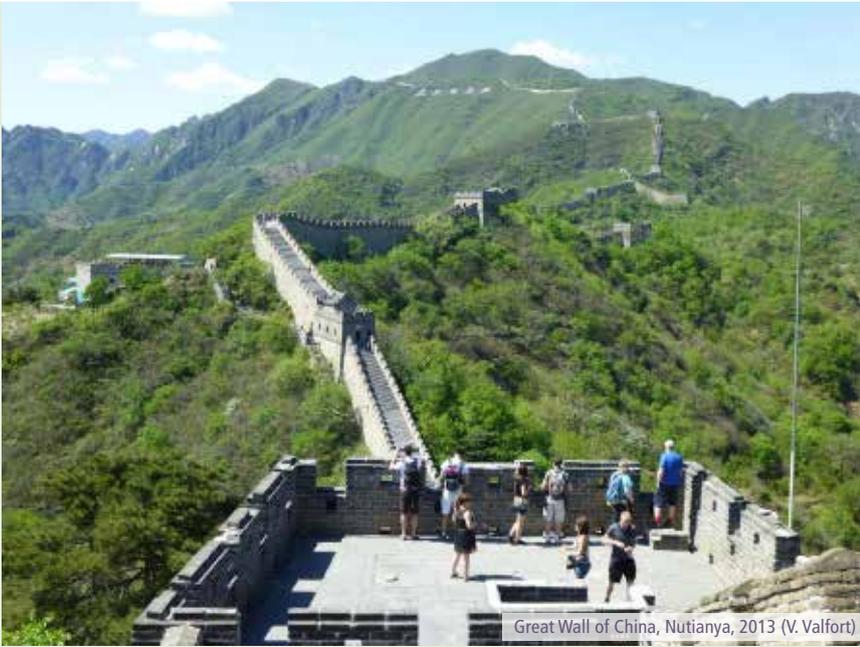
In this context of increasing tourism, mountain regions have a particularly important role. Mountains provided the sites of some of the earliest forms of tourism: in the 18th century the Alps became an essential stop for English aristocrats, when it became fashionable to make the “Grand Tour”. The canons of landscape aesthetics, in the West as in China and Japan, conferred a special value on mountain vistas. Not only has this attraction to mountains persisted, it has become global. There is no region in the world today where the special qualities of mountain landscapes are not acknowledged. Associated qualities have now become assets, valuable for the development of mountain tourism: snow, with the invention and spread of skiing; the diversity of local peoples and traditional cultural practices; the abundance of mineral and hot springs; the sacred dimension attributed to many mountain sites and summits; biological and geological diversity, reflected in unique geological formations and plant communities, as well as emblematic animal species, such as chamois, ibex, mountain lions, and pandas. All of these resources will likely take on increasing importance in the coming decades, as urbanisation exerts a growing impact on our world and lifestyles, and the appeal of travel and tourism continues to expand.

Measuring the level of tourism in mountain regions is not easy. The accuracy of available statistics for both international tourism and domestic tourism varies considerably from one region of the world to another. And in any case, available figures are but rough estimates. Thus UNEP, for example, puts the proportion of total tourist flows visiting mountain destinations at 15 to 20%. However, available data indicate that this figure conceals some extremely diverse situations, ranging from certain mountain regions of the northern hemisphere - particularly the Alps, the Rockies and Japan, where there are tens of millions of tourists - to certain mountainous countries of the Global South where there are few tourists, or none at all, as in the Sahel, Indonesia or central Mexico. Numerous research studies and local experiences have helped identify the great variety of challenges associated with tourism, not only in terms of development but also in terms of economic, socio-cultural and environmental sustainability.

First of all, expectations in terms of development are considerable and quite varied depending on the stakeholders. Tourism brought many



Pamir, Tajikistan, 2008 (S. Henriod: www.henriod.info)



Great Wall of China, Nutianya, 2013 (V. Valfort)

benefits to those mountain regions that were among the first to receive visitors, such as improvements to infrastructure for access and communication, creation of jobs and businesses, and an opening to the outside world and experiences of otherness. The success achieved in numerous regions over a period of decades (or, in certain cases, even centuries) in Europe, North America, Japan, Chile, Argentina, Australia and New Zealand has given rise to hopes and expectations in many other mountain regions of the world, such as the Pamirs, Tien Shan, the Sahel and the central Andes, where firstly western tourists, and then domestic tourists, became increasingly interested in them. Given that mountain regions often suffer from poor accessibility and infrastructure, as well as social, political and economic marginality — either due to neglect by the state or a certain mistrust of peripheral populations — tourism may appear to many local actors as a rare lever for development.

Another problem is that, even if the curiosity of tourists and the wishes of local stakeholders converge, this does not guarantee that genuine development will take place, or that it will be equitable and sustainable. Tourism development in mountain regions depends on many factors: attractiveness of the destination, safety, professionalism of local businesses and hospitality structures, availability of capital, etc. Often there is insufficient capital to create the infrastructure needed for reaching sites or accommodating visitors. Ethnic and border conflicts are frequent in mountain regions forming frontiers, such as Kashmir, or in regions subjected to severe assimilation policies, such as the high plateaus of Central Asia, and the resulting instability jeopardizes their attractiveness and the efforts of many stakeholders. Furthermore, the means used to develop tourism do not always favour its sustainability. Sometimes major projects are carried out without first assessing or anticipating their impact on the environment, employment, or the communities concerned. Other times, the proliferation of small individual initiatives is not sufficiently regulated, a situation which can also lead to detrimental impacts on the landscape, the environment, and social relations. Often the effects on local econo-

mies fail to meet expectations, particularly when benefits remain in the hands of a few large stakeholders, frequently from outside the regions concerned. Finally, the generalised competition among tourist destinations, not only between different mountain regions, but also between the mountains, the major cities, and the coastlines, is a real challenge for all those promoting local and regional tourism development.

It is also important to point out that the abundance of protected natural areas in mountain regions, while providing a solid foundation for tourism, is not a guarantee of sustainability. Admittedly, such areas can contribute to the responsible management and protection of environmental resources, and they are often tourist attractions in their own right. But protected areas are also subject to a number of threats: overuse, antagonism from local residents who may receive little economic benefit and may even deny access to visitors. It is also important to keep in mind that, although tourism, in the best of worlds, is an important motor for economic growth, the redistribution of wealth, and the social development and empowerment of local populations, this activity is particularly vulnerable to a number of factors: climate change, political and economic crises, internal instability, and competition for resources. Sustainability objectives in tourism must contend with a context that is increasingly complex, politicised and globalised. The Aïr Massif, in Niger, is a tragic example. For a few decades, it was a promising tourist destination, but today is isolated by civil war and terrorism.

For all the positive reasons, tourism development in mountain regions should certainly be encouraged, particularly in peripheral regions of the countries of the Global South. However, because this endeavour concerns natural environments and local societies that are often vulnerable and less resilient than elsewhere, it is all the more essential that tourism is introduced in ways that contribute to the sustainable development of the regions and the societies concerned.



Mojave National Preserve, California, USA, 2008 (S. Billeau Beuze)



Cultural diversity and social change

2





Bernard Debarbieux

Introduction

Historical Gotthard coach, Andermatt, Switzerland, 2008 (A. Campi: albertocampiphoto.com)

Most often, tourism brings into contact people from very different worlds. Because this contact is recurrent, it inevitably has an impact on individual and collective identities — those of the tourists, certainly, but also, and most importantly, those of the host populations. The feelings of social and territorial belonging of these populations may become strengthened or weakened by recurring contact with tourists, whose behavior is often very different from their own. Tourists furthermore have preconceptions regarding the local culture, crafts and heritage they expect to encounter, and these contribute to the construction or staging of a corresponding tourism “product” by the communities visited. It is a matter of local populations deciding what they want to show to tourists, and what they prefer to keep to themselves. It also concerns assessing the consequences of monetizing the local economy, and marketing traditional practices, which are presented as folklore.

The diverse impacts of tourism on culture and identity are perceived locally as bringing both possibilities and dangers. The interest expressed by tourists in indigenous know-how and crafts can help to enhance their value in the eyes of local residents, restoring a certain pride that had perhaps diminished over time. This is notably the case for the traditions of populations that feel marginalized in their own country, such as the Tuareg pastoralists in the Air mountains of Niger. Some local populations, on the other hand, find the presence of tourists disruptive, and their interest and curiosity threatening. Traditional practices, and the meanings that local people give them, can be altered when staged or displayed, as can be observed on Mount Kailash. Tourism development of remote and marginalized regions provides an opening on the world and to modernity for populations that may be perceived as backward or suffer exclusion in their own countries. Such contact and recognition can be perceived as either an opportunity or a threat, depending on the point of view.

What is at stake in these situations is not only cultural, but also social and political. Tourist development in areas that have long sustained themselves on other activities can lead to changes in social hierarchies and shifts in the resources and roles of different groups. Tourist interest is often strongest in precisely those aspects of the milieu that local societies have begun to abandon or neglect: remote high mountains, old villages, rustic architecture etc. Those among the local population who are the quickest or most able to develop and promote these resources, for example by offering services as guides, or transforming traditional structures into



Riva San Vitale, Switzerland, 2009 (H. Mayer)

hostels, may become the principal interlocutors for tourists, and the primary beneficiaries of their presence. The resulting realignment of wealth and status within local communities is not without problems. This is particularly evident regarding women; for societies where little value or status is placed on women's work, the interest of tourists in what they produce, and more generally in living conditions, has led to tensions and rapid societal shifts. Tourism thus very often gives rise to profound, often irreversible social transformations. For some observers, tourism gives rise to new inequalities, while further threatening a breakdown of traditional social relations; for others, it represents a unique opportunity to attain needed changes in social relations, often seen as fairer from the perspective of outsiders.



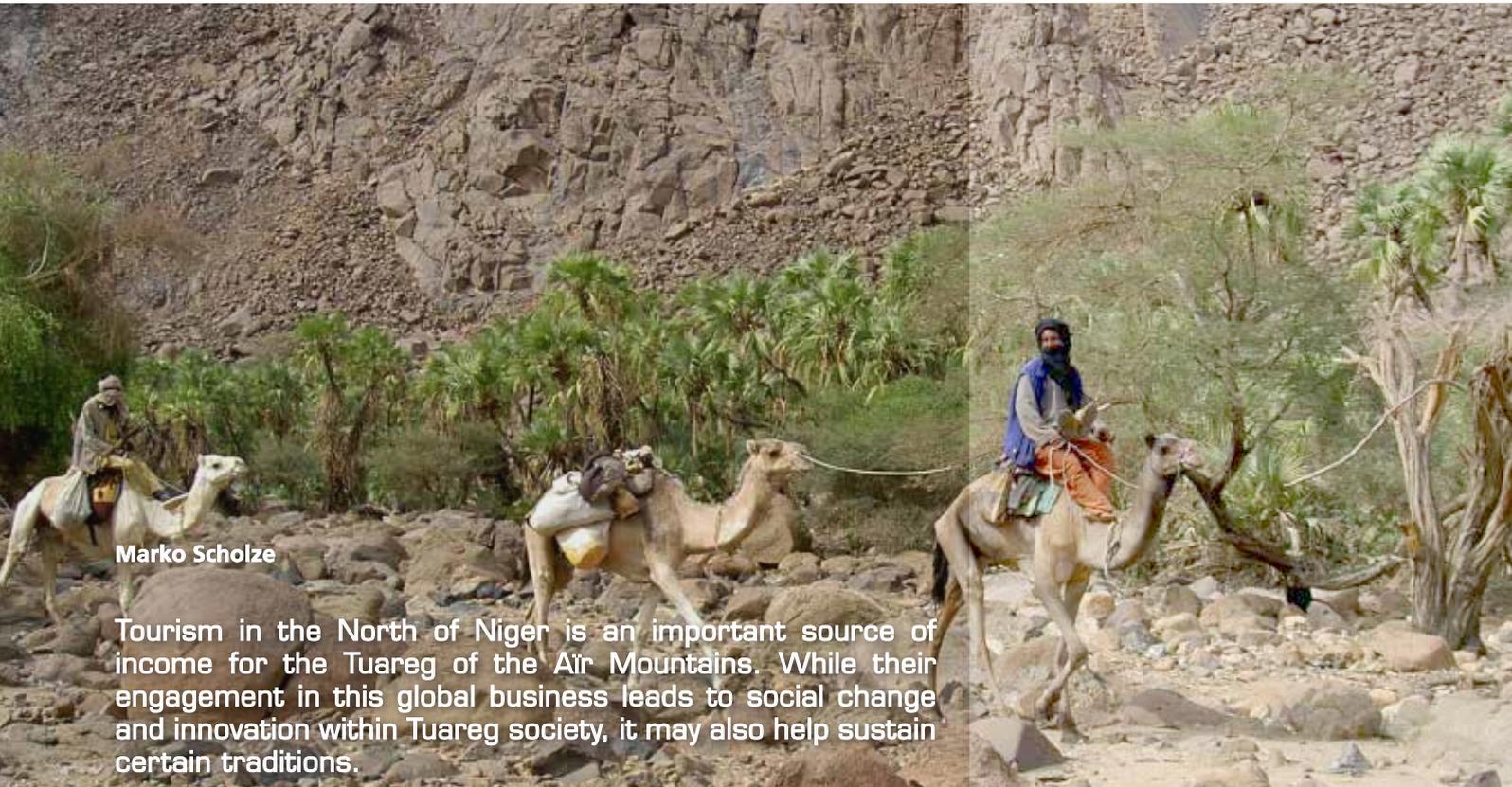
Kelaa M'Gouna, Morocco, 2011 and Tizi n'Test, Morocco, 2012 (S. Billeau Beuze).



In countries where mountain-based populations have suffered exclusion or discrimination, the interest of tourists in their lives and environments has given them opportunities to advance their cause both nationally and internationally. Many such marginalized populations in mountain regions have perceived this vehicle by way of tourism, beginning in Europe, in the mid-twentieth century, and in more recent years in the Maghreb, on the Bolivian Altiplano, among Berbers of the Atlas mountains, as well as in the mountainous zones of China and Southeast Asia.

Under these considerations, to embark on tourism development in mountain regions demands a careful assessment of the range and extent of the hopes and fears of local populations with respect to their cultures, social structures and collective identities. This requires thinking about these concerns seriously and perceptively; it implies, in other words, accepting that the effects of tourism in peripheral mountains may always be ambivalent.

Tourism and the Tuareg in the Air Mountains of Niger



Marko Scholze

Tourism in the North of Niger is an important source of income for the Tuareg of the Air Mountains. While their engagement in this global business leads to social change and innovation within Tuareg society, it may also help sustain certain traditions.

Hikers who crossed Mount Tamgak and go in the direction of Chiriet and Ténéré desert, Air, Niger, 2006 (A. Morel)

Tourism in the Air Mountains and the Ténéré desert in the North of Niger was introduced by European tour-operators who began to organize tours in the 1960s. These early operators employed Tuareg who lived in the region as staff. Some of these Tuareg, however, quickly appropriated this model, and from 1980 onward created their own travel agencies. Over the years, tourism became a well established economic alternative in Tuareg society alongside traditional camel herding, caravan trade and horticulture. By 2007, there were 62 local travel agencies in the regional capital of Agadez. Their Tuareg owners employ over 500 guides, drivers, cooks and camel drivers, catering for to up to 5000 tourists annually, predominantly from France, Germany, Austria, Switzerland, Italy and the US. They work both with tour-operators in Europe and directly with individual tourists. The tours include round trips in the area of one to three weeks, traveling with off-road vehicles (65 % of all tours) or camels (30%), or on foot (5%).

Tourism in the North of Niger represents a typical peripheral destination on the global market. The area is one of limited accessibility, and touristic infrastructure is almost non-existent outside Agadez. Thus, tourists are looking to experience a calm and simple lifestyle, drawn by the myth of the Sahara and the Tuareg that developed in Europe during the 19th century.

Although tourism development in Niger remains small-scale, the economic and socio-cultural effects on Tuareg society are evident. The local travel agencies are dominated by Tuareg belonging to the social strata of the nobles (*imajeghen*) and vassals (*imghad*) within traditional hierarchies. They see their work as perpetuating their former pastoral lives, but using modern means. Their activities have diversified



Lessons learned

In the Air Mountains, tourism provides opportunities for Tuareg men and women of diverse social strata to diversify their sources of income. Beyond the economic benefits to individuals, tourism helps generate taxes for the communes. Camel tours (*meharees*) are especially suitable for tourism development in the region, as they are consistent with local cultural practices and appropriate to the fragile natural environment. Security will have to be restored to the region if tourism is to enjoy a renaissance. When that occurs, it will be important to foster an ongoing process of professionalization and training of the Tuareg involved, be they the owners and staff of the travel firms, or the artisans, smiths and merchants who produce and sell handicrafts to tourists. In this way, sustainable, equitable and culturally appropriate tourism practices may be promoted and extended.

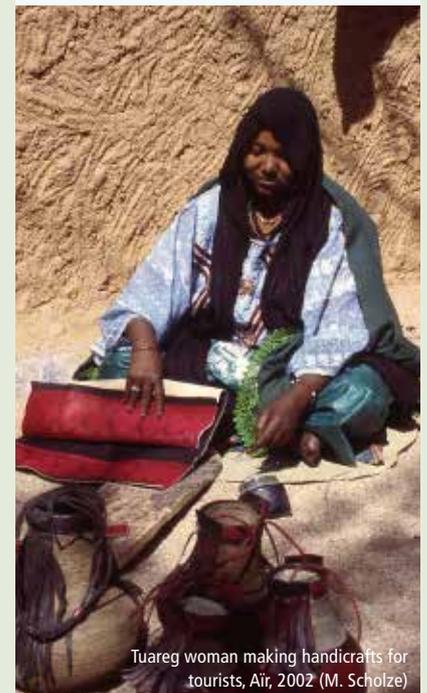


Meharee in Air, Niger, 2006 (A. Morel)

the economic system of the Tuareg and have helped to counteract accelerating processes like sedentarization or labour migration, which are linked to growing desertification and a deterioration of livelihoods. Camel tours (*meharee*) especially have helped sustain the herds of the nomads, who rent their animals to the agencies. These Tuareg also act as cultural brokers, facilitating contact between tourists and the host society.

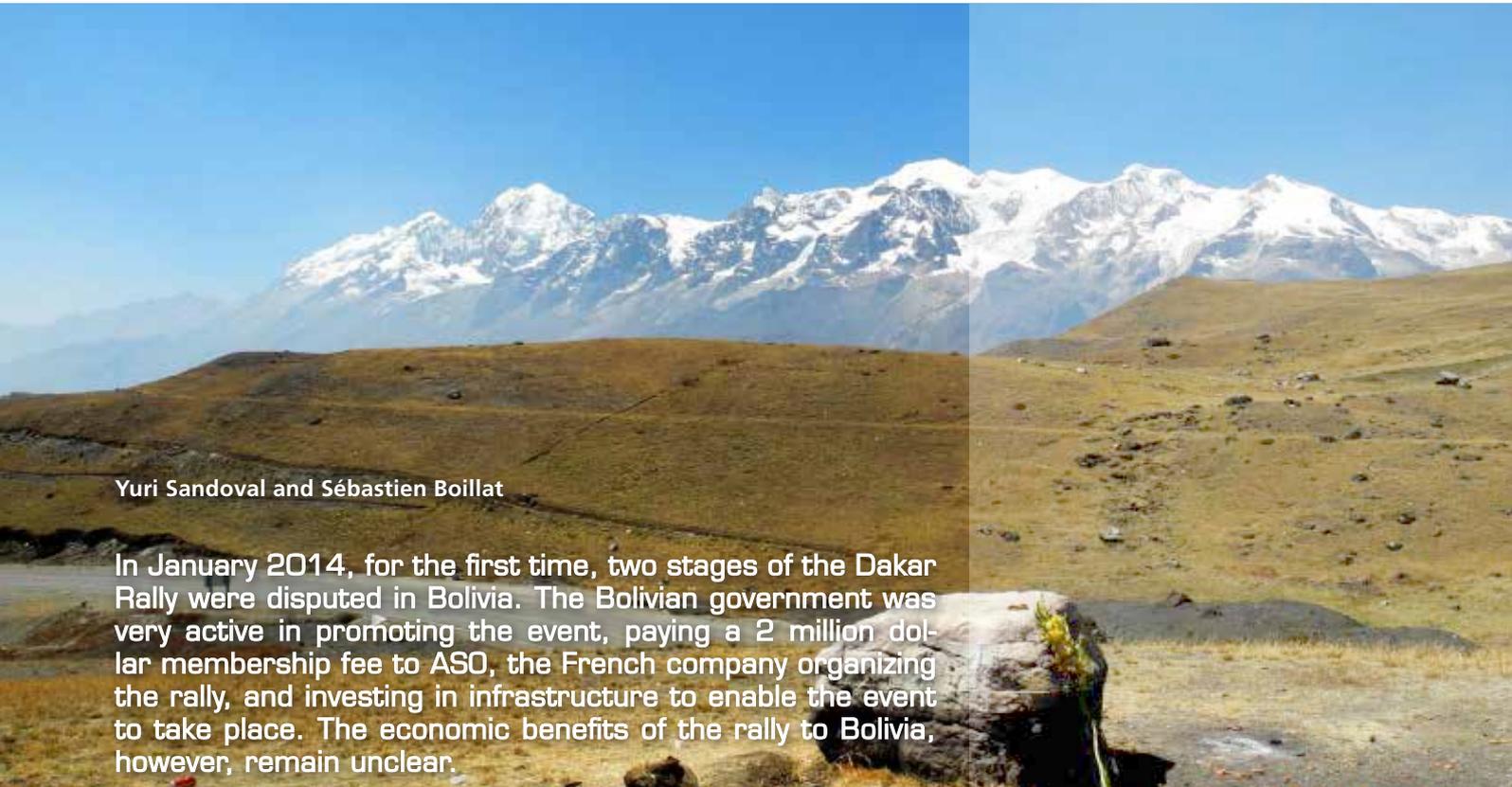
Another group active in the local tourism economy are Tuareg smiths (*inadan*) who sell handicrafts like silver jewellery and sculptures of serpentine stone – most of it produced and designed specifically for the tourist market – as well as traditional baskets and leather bags. Some of these artisans have become wealthy entrepreneurs through tourism, improving their former socially inferior status as they become less economically dependent on the noble classes.

Both groups, however, are currently suffering from the last Tuareg rebellion (2007-2009) and the persistent lack of security in the region due to the activities of smugglers and terrorist groups like Al Qaeda. This has led to a complete breakdown of tourism, illustrating the fragility of this sector that depends on a minimum of stability.



Tuareg woman making handicrafts for tourists, Air, 2002 (M. Scholze)

All-terrain vehicles and Mother Earth: tourism, identity and the Dakar Rally in Bolivia



Yuri Sandoval and Sébastien Boillat

In January 2014, for the first time, two stages of the Dakar Rally were disputed in Bolivia. The Bolivian government was very active in promoting the event, paying a 2 million dollar membership fee to ASO, the French company organizing the rally, and investing in infrastructure to enable the event to take place. The economic benefits of the rally to Bolivia, however, remain unclear.

Ancohumas and Illampu from the road to Sorata, 2012 (L. Lerch)

The largely off-road long-distance rally, which currently entails hundreds of cars, motorcycles, trucks and all-terrain vehicles crossing principally Argentina and Chile, was promoted in Bolivia to boost tourism in the Southern Altiplano, a high-altitude arid region inhabited mainly by indigenous people, and home to the emblematic *Salar de Uyuni*, the world's largest salt flat and one of Bolivia's principal attractions.

Enthusiasm for the event came from the "first indigenous government in America" led by Evo Morales, of Aymara descent, who has sought to give greater recognition to indigenous peoples. Since becoming president, Morales has promoted "living well" as an alternative to consumerism, withdrawn Bolivia from the REDD+ program, and enacted a series of regulations that consecrate Mother Earth as a living being with rights, inspired by the indigenous concept of "Pachamama".

Is the Dakar Rally innocent in environmental and cultural terms? The rally, originally held in North Africa, left the continent because of the threat of terrorism, but also perhaps for being associated with neocolonial *Françafrique*. The off-road, and likely environmentally damaging, race of all-terrain vehicles and motorcycles in Bolivia has little in common with the country's traditional cultural values or patterns of land use. In Chile and Peru, the rally damaged ancient sites of cultural importance for indigenous peoples. Yet in Bolivia, surprisingly, evidence of ecological concern came principally from the ASO itself, which claimed to offset its CO2 emissions by making contributions to conservation programs in the Peruvian Amazon under a scheme of the REDD+ type.



For those who are concerned with the sustainable use and development of mountainous regions, the Dakar Rally on the high plateau of Bolivia invites a number of questions. First, why did the government so actively support the rally, and why did so few people in Bolivia oppose it? Only one small indigenous group stood against the rally, initially, but later withdrew its opposition. In contrast, indigenous groups blocked the rally in Argentina, Ecuador rejected the organizer's petitions for the rally to cross its territory, and Peru, having participated in the rally in 2013, regretted that decision and denied it access in 2014. While only time will tell how Bolivia ultimately receives or rejects the Dakar rally on its territory, the rally's initial enthusiastic, or at least non-polemical, reception suggests that the common Western association of "indigenous" with "love of nature" actually hides a much more complex relationship. Yet the question remains: how can the Dakar Rally be compatible with an ideological foundation leading to the enactment of a Mother Earth rights law? Given the region's high altitude and aridity, the vegetation and soils of the Bolivian *altiplano* are doubly vulnerable, recovering only slowly from even minor disturbances, let alone the severe effect of hundreds of racing vehicles.

It is possible that there was more indigenous opposition to the rally than was immediately apparent. Indigenous groups opposing the rally might have been marginalized. The recent withdrawal of some indigenous organizations from government suggests divisions between majority and minority ethnic groups, reflecting the complexity of this diverse, albeit largely indigenous, nation.

Additionally, economic development and growth no doubt affect Bolivian indigenous identity, for example, as more indigenous people own vehicles and adopt globalized patterns of consumption and economic aspirations. On the eve of the 2014 elections, Evo Morales certainly had an interest in meeting his constituents' demands for pro-development policies. In this context, perhaps a new mainstream Bolivian identity is emerging where respecting Mother Earth is not incompatible with carving scars into her body with all-terrain vehicles. Nonetheless, despite having an indigenous majority, Bolivia will not be free from having to navigate the delicate terrain of ethnic pluralism and environmental stewardship.



Acknowledgments

This article was written as part of a research partnership between the Universidad Mayor de San Andrés (La Paz) and the University of Geneva, and with the support of the Swiss Network for International Studies (www.snis.ch).

Pilgrimage in the transboundary Kailash Sacred Landscape

Marjorie van Strien and Rajan Kotru

The remote south-western portion of the Tibet Autonomous Region of China, together with the bordering districts of Nepal and India, is a global “cultural hotspot” of historical and spiritual significance. The area represents a sacred landscape for over one billion people in Asia and around the globe, and is considered holy by a number of religions, including Hindu, Buddhist, Bon Po, Jain, and Sikh. Its deep and rich cultural diversity has become threatened in recent years by the impact of poverty, globalisation, and unregulated development, challenging the sustainability of local livelihoods and ecosystems. This situation is now further complicated by perceptible climate change, which is likely to worsen in the years to come, thereby placing further demands on practices and policy to adapt.

The limited options for earning a livelihood in the region, together with the stresses mentioned above, have fed a cycle of widespread resource degradation. Inadequately managed subsistence activities, tourism and pilgrimages, in addition to increasing urbanisation and climate change, demand an integrated approach for both conservation and sustainable development in the Kailash Sacred Landscape. Appropriate adaptation measures to tackle the changes affecting local communities are urgently required to safeguard the irreplaceable natural and cultural heritage of this vast mountain region. More specifically, socio-cultural resilience must be strengthened, economic development encouraged, and the local environment preserved. It is in this context, that China, India and Nepal, accompanied by The International Centre for Integrated Mountain Development (ICIMOD), have delineated a common region as a basis for a long-term joint initiative for conservation and development.

Tourism, as one of the economic pillars of the region, has driven infrastructure development, which in turn has led to increasing numbers of tourists while stimulating further economic opportunities. Every year, thousands of religious and spiritual pilgrims and tourists from around the world undertake the arduous journey to this sacred landscape, travelling across ancient routes through India, Nepal, and the Tibetan Plateau. Tapping the growth of these tourism markets within a framework of sustainable development could be an effective mechanism both for enhancing local livelihoods and conserving heritage. Many challenges remain, however, in realizing such a vision in this complex cultural, topographic and political landscape. In 2014, the auspicious Year of the Horse, more than one million pilgrims are expected to traverse the region to visit important sacred sites. Through the Kailash Sacred

Tibetan pilgrims on their spiritual journey, 2013 (G. Rawat)



Landscape Conservation and Development Initiative, ICIMOD is collaborating with Sichuan University and the Chinese Academy of Sciences to galvanise responsible tourism activities and enhance livelihood opportunities for local communities. The initiative offers a platform that will enable stakeholders and government representatives of China, India and Nepal to share lessons learned and propose approaches and practices for making tourism a force for sustainable development in the region.

Recognizing the important role of the private sector in sustainable tourism management, the platform suggested that travel should become more responsible and that urgent solutions are needed for environmental protection, especially waste management. To accomplish this, the attitude of pilgrims and tour operators has to adjust accordingly. Based on successful examples in the region, the platform has established guidelines for responsible pilgrimages, focusing on environmental, socio-cultural and health related concerns. In addition, the platform's counterparts are collaborating with local governance structures at destinations in each country to strengthen the management of sacred sites and reinforce links that enhance the livelihoods of local communities.

The initiative seeks to improve communication between the corresponding country partners, for example, by facilitating a mentorship program featuring joint visits to other landscapes featuring international cooperation, and by working to deepen "ownership" of an agreed set of principles for project planning and implementation, including good governance. Transboundary cooperation requires a conducive political atmosphere; it must grow organically within the framework of what is, at times, a fragile balance. Responsible tourism, a widely shared interest, has proven a promising vehicle for international cooperation, communication and action in the Kailash Sacred Landscape.



Agrotourism and the development of multiple professional identities in the Austrian Tyrol

Markus Schermer

Over the past fifty years, tourism has played a pivotal role in sustaining farming as a livelihood in the mountainous region of Tyrol, Austria. The most complete integration of tourism into the economy of a farm is probably reflected in the offering of "farm stays", or vacations on a farm. Currently about one third of the 15,000 farms in Tyrol offer on-farm accommodation, and about 400 have specialised in this activity, forming part of a professional association called "Holidays on the Farm".

Many of these farms would not be viable without a tourism component. On the other hand, they would not be viable as tourist sites without continuing farming. Beyond this useful synergy, farm tourism brings recognition to local farm products, appreciation for the cultural landscape, and increases societal support that is vital for the continuity of family-based farming. Marketing farm vacations allows farm households to develop a twofold professional identity. The farm family takes pride in simultaneously operating a farm and a tourism enterprise. Although the responsibility is often divided along gender lines, the integration of everybody into both enterprises is essential for long-term success. Those dealing with tourists need to give detailed information about production activities, while the modes of farming need to conform with tourist expectations. Farms offering farm stays are therefore often more diversified in their operations and tend to process their raw products into finished goods. This allows adding value to products without increasing the volume of production, and it reduces the pressure to merely produce raw materials, which is a common result of modernization and intensification. The farmer remains, or once again increasingly becomes, a food processor. In addition to food production, the preserved cultural landscape becomes a market good, as farm tourists seek and value this dimension. The chairman of the association thus could proudly announce in an interview: "Holidays on the Farm is the only agricultural branch which actively sells the cultural landscape".

The regulations for certifying participating farms create a special segment within the region's tourism landscape. Instead of expanding on hard infrastructure, the criteria favour soft skills in an intimate setting, offering an innovative milieu. Members have responded enthusiastically to professionalization courses where they can learn

Going am Wilden Kaiser, 2012 (Verband Urlaub
Association am Bauernhauf Tirol)





Elsendorf, Tyrol, 2007 (M. Edard)

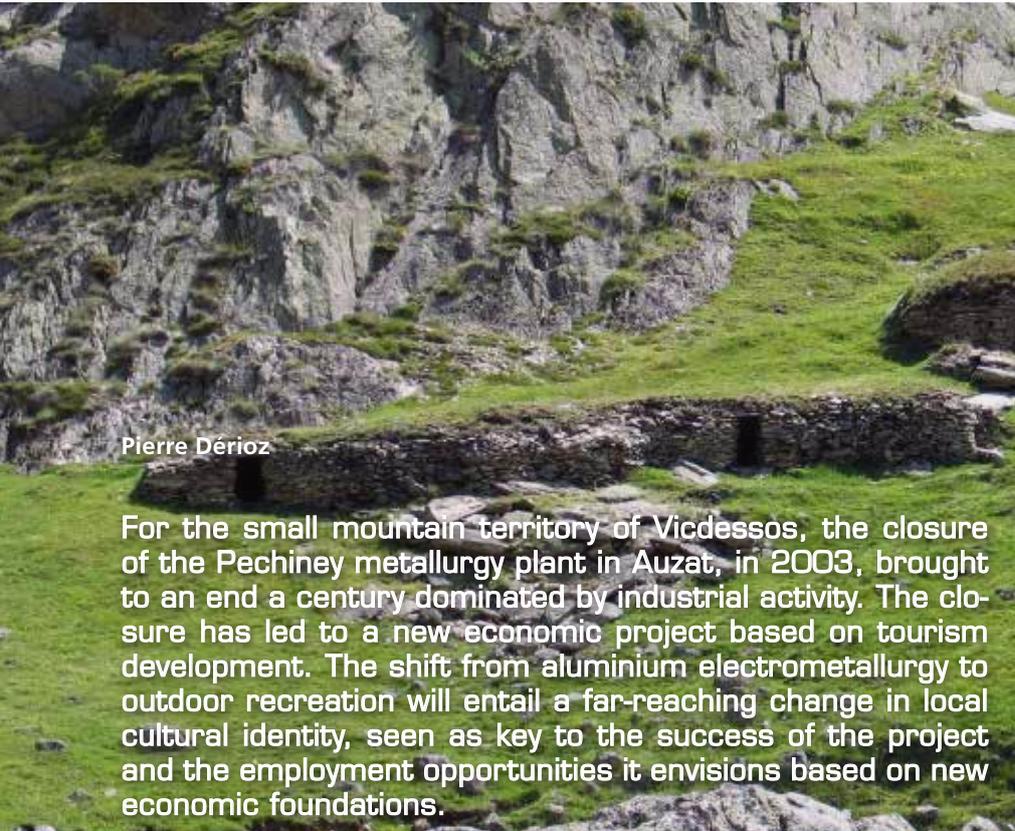
about the latest trends in marketing and further develop their offers of quality accommodation. Authentic farm experiences and links to local cultural traditions and products help justify the premium prices that the activity often commands. Some participants have termed this strategy “going back to the core competences”.

The integration of farming and tourism in the Austrian Tyrol has contributed to the continued viability of sustainable, small-scale farms, which now, however, assume multiple identities. In the process, the commonly held images of “farmers” as well as “tourism entrepreneurs” have been transformed.



Farm tourism helps integrate food production and the provision of tourism services, Tyrol, 2012 (Verband Urlaub Association am Bauernhauf Tirol)

From electrometallurgy to outdoor recreation in Vicdessos (Ariège, French Pyrenees)



Pierre Dérioz

For the small mountain territory of Vicdessos, the closure of the Pechiney metallurgy plant in Auzat, in 2003, brought to an end a century dominated by industrial activity. The closure has led to a new economic project based on tourism development. The shift from aluminium electrometallurgy to outdoor recreation will entail a far-reaching change in local cultural identity, seen as key to the success of the project and the employment opportunities it envisions based on new economic foundations.



Restored shepherd's shelter, Soulcem, 2011 (P. Dérioz)

The closure of the Auzat plant in 2003 represents the conclusion of a long-term process of de-industrialization that has deeply transformed local society. Some elected representatives had anticipated this change as early as the beginning of the 1990s and had already begun taking steps to orient this small territory (10 local communities, 1400 inhabitants) towards a new economy based on tourism, drawing upon the region's scenic beauty and its many opportunities for outdoor activities. The innovative concept of "sports and nature resort", introduced in 1993 to fit with the inter-municipal scope of the strategy, widens the notion of resort to the scale of the whole territory. It also combines extensive natural areas devoted to outdoor activities (trekking, paragliding, canyoning...) with infrastructures installed in the valley (riding school, *via ferrata*, adventure park, climbing hall) and a small ski resort. The region was able to fund the initiative with resources from its former industrial activities, revenue from hydroelectric power generation, and substantial public subsidies directed toward revitalization.

In the context of traumatic industrial job losses, the socio-economic sustainability of the new development model is a key concern, as it not only seeks to enhance the appeal of this "destination" to tourists, but also to reshape territorial identity. Securing the support of the local population (year-round and seasonal residents) is seen as essential for the success of the new venture. The project involves the enhancement of selected aspects of collective heritage, such as agricultural terraces, former mines, historic stone shepherd's shelters, and even hydroelectric installations. Some of these have been featured on interpretive trails, which have been emerging at a rate of one per year since the opening of the *Maison des Patrimoines* in Auzat, in 2007. Initiatives to promote territorial heritage have so far emphasized



human activities, viewed from an historical and cultural perspective, rather than the natural environment, despite the clear improvement of the latter on the valley floor since the disappearance of a very polluting industry. The surrounding mountain landscape, as a fundamental resource for the new economy, nonetheless continues to offer an outstanding natural setting for outdoor activities.

The integration of the industrial heritage in the “collective narrative” about the territory (dedicated museographic space, an aluminium interpretive trail) has undoubtedly been a way to move beyond the “Pechiney era”, while at the same time acknowledging its contribution. Local leaders of the reconversion project, however, decided to move quickly to eliminate the main physical traces of that industrial past, demolishing the factory as early as 2006 and cleaning up waste sites, thereby avoiding a painful intermediate phase with a landscape marred by industrial wastelands. During the earlier era of near full-employment at the Pechiney metallurgy plant, traditional activities such as animal husbandry were marginalized. Now, they may be on the verge of a resurgence, as pastoral activities are seen not only as a fundamental part of local heritage but also as essential to land management outside the villages and in the high mountain pastures. Although Vicdessos does not produce a famous local cheese or other renowned products, direct producer-to-consumer sales of produce are well established. From the perspective of tourism, animal husbandry may add to the appeal of the landscape, and food-related fairs and traditional festivals marking the seasonal movement of livestock to and from the high-mountain pastures are enjoying growing popularity. Thus, after decades that saw the gradual abandonment of grazing, local producers may now play an increasingly important role in the local economy as the territory of Vicdessos moves beyond its industrial past and establishes new roots in the Pyrenean landscape.



From the Montcalm Massif to the Pinet, 2008 (P. Dério)



One of the interpretive displays along the “Chemin de l’aluminium”, Auzat, 2011 (P. Dério)

Heritage policies and the renewal of local communities in the Carpathians



Zbigniew Niewiadomski

In the Carpathian Mountains of Central, Eastern, and Southern Europe, an international Convention is helping to advance sustainable development, environmental protection, and heritage preservation.

Wooden Greek Catholic church built in 1731, Graziowa, Poland, 2013 (B. Hejlasz, UNEP/GRID)

The Carpathian mountains, a region of high cultural and biological diversity, extend into the territories of seven states: the Czech Republic, Hungary, Poland, Romania, Serbia, the Slovak Republic, and Ukraine. In 2003 in Kiev, Ukraine, these states signed the Framework Convention on the Protection and Sustainable Development of the Carpathians (Carpathian Convention). Among the Convention's many goals is the strengthening of local communities in this mountain region and finding synergies between sustainable tourism development and heritage preservation.

The richness of local cultures in the Carpathians, a melting pot of Roman and Byzantine rites, developed from interactions and exchanges between various nations and ethnic groups, including, for example, Vlach shepherds who migrated and settled along the range between the 13th and 17th centuries. Today, this cultural diversity is increasingly threatened due to changing social and economic conditions, migration, and globalization. In particular, the depopulation of rural areas has aggravated the loss of traditional land management, agricultural practices, arts, crafts and occupations.

The Carpathians, which are home to the most extensive areas of old-growth forests in Europe, cover a vast and varied terrain and provide refuge to many endangered plant and animal species. The Protocol on Sustainable Tourism (Bratislava, Slovak Republic, 2011) to the Carpathian Convention aims to ensure that tourism development, which relies on both natural and cultural assets, protects biological and cultural diversity. One of its strategies is to develop tourism in less visited sites and regions, so as to mitigate the pressure now concentrated, for example, in better-known but ecologically sensitive protected areas. Broadening the reach of tourism



in this way would allow its economic benefits to be shared more equitably across the region's municipalities. Another strategy is to provide economic incentives for heritage preservation and to promote thematic cultural-heritage routes and trails, which disperse tourism and are able to generate demand for tourist services and local employment even in the off-season.

Indeed, the region has many heritage-related "unique selling points". It was the cradle of the world's oil industry, and it preserves hundreds of wooden Roman and Greek Catholic and Orthodox churches, many listed as UNESCO World Heritage sites (17 sites in the Polish Carpathians, and 25 in the Romanian, Slovak and Ukrainian Carpathians). Thematic trails in the Polish Carpathians have thus been able to highlight wooden architecture, icons, the oil industry, and traditional handicrafts, each offering its own touristic appeal.

Since 2012, the United Nations Environment Program - Global Resource Information Database (UNEP/GRID) in Warsaw has cooperated with local communities under the "Carpathians Unite" project to pursue three objectives: first, to support the revival of traditional shepherding, including the promotion of local sheep products, two of which are now registered by the European Commission; second, to promote associated heritage sites and trails; and third, to draft a new thematic Protocol on cultural heritage to the Convention, so as to further consolidate these gains and to set common standards for heritage policies across this unique and extensive mountain region.



Wooden Greek Catholic church, built in 1791, listed by UNESCO WHS in 2013, Smolnik, Poland, 2000 (Z. Niewiadomski)

Cultural routes: serving tourism, local economies and landscape



Guy Schneider and Werner Paul Meyer

In recent years, the concept of "cultural routes", developed in Switzerland, has attracted interest not only in European countries but also in the Himalayan region. In May 2010, the International Centre for Integrated Mountain Development (ICIMOD), based in Kathmandu, invited *ViaStoria*, a Swiss entity dedicated to protecting and promoting historical transport routes, to share its experiences.

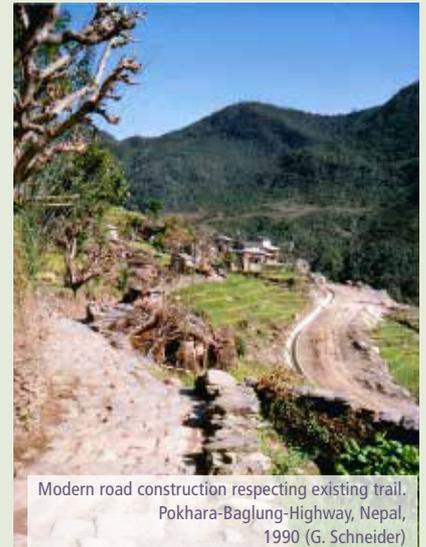
Beginning in the 20th century, the historical transportation networks in the Alps became increasingly impacted by rapid infrastructure expansion, particularly road construction. Many attractive trails and mule tracks were gradually utilized for power and pipelines, widened to provide roads, or simply allowed to deteriorate. As a first step to stem this loss and related degradation of the Alpine landscape, the Swiss Government launched a series of inventories under the "Federal Law on the Protection of Nature and Cultural Heritage" (1966). Among them was the "Inventory of Historic Traffic Routes" (IVS), perhaps the first of its kind. The results of the IVS not only provided a foundation for more environmentally and culturally sensitive approaches to new infrastructure projects, they also provided the basis for an innovative tourism program, "Cultural Routes of Switzerland". This program, encompassing a network of 300 routes across the country, promotes "soft trekking and biking tourism", especially in economically disadvantaged areas. The routes, which incorporate some of the most attractive historic trails, are linked to other significant elements of the cultural and natural landscape, forming a basis for sustainable tourism that supports local products and services (including, for example, regional culinary specialties). This revitalization of interest in historic routes has been accompanied by conservation initiatives and efforts to rehabilitate the trails, resulting in enhanced protection for the routes and the surrounding landscape.

In the Himalayas, with their spectacular mountain landscapes, trekking tourism along ancient and culturally rich trading and pilgrimage routes is currently threatened by rapid haphazard road construction destroying trails and associated monuments. The decline of the formerly attractive Annapurna round trek is a notable example of how this kind of ill-planned or destructive development can under-

Trail with religious structures, Val Bavona, Switzerland, 2000 (G. Schneider)



mine the economic opportunities that trekking provides local populations. Tourism services along trekking routes provide significant cash income, helping alleviate poverty and reduce associated rural-to-urban migration. Interest in trekking in the Himalayas, which offer exceptional opportunities to experience culture, history, and vistas that include the highest mountains in the world, is increasing. The implementation of a network of "Trans-Himalayan Heritage Routes", analogous to the Swiss Cultural Routes, combined with well-directed poverty alleviation measures, could have several benefits: preservation of historic routes and their associated monuments as a valuable cultural good; extension of the local opportunities offered by trekking tourism to additional communities; dispersion of some of the traffic from the more intensely visited sites; strengthening of local economies and preservation of the cultural landscape.



Modern road construction respecting existing trail.
Pokhara-Baglung-Highway, Nepal,
1990 (G. Schneider)

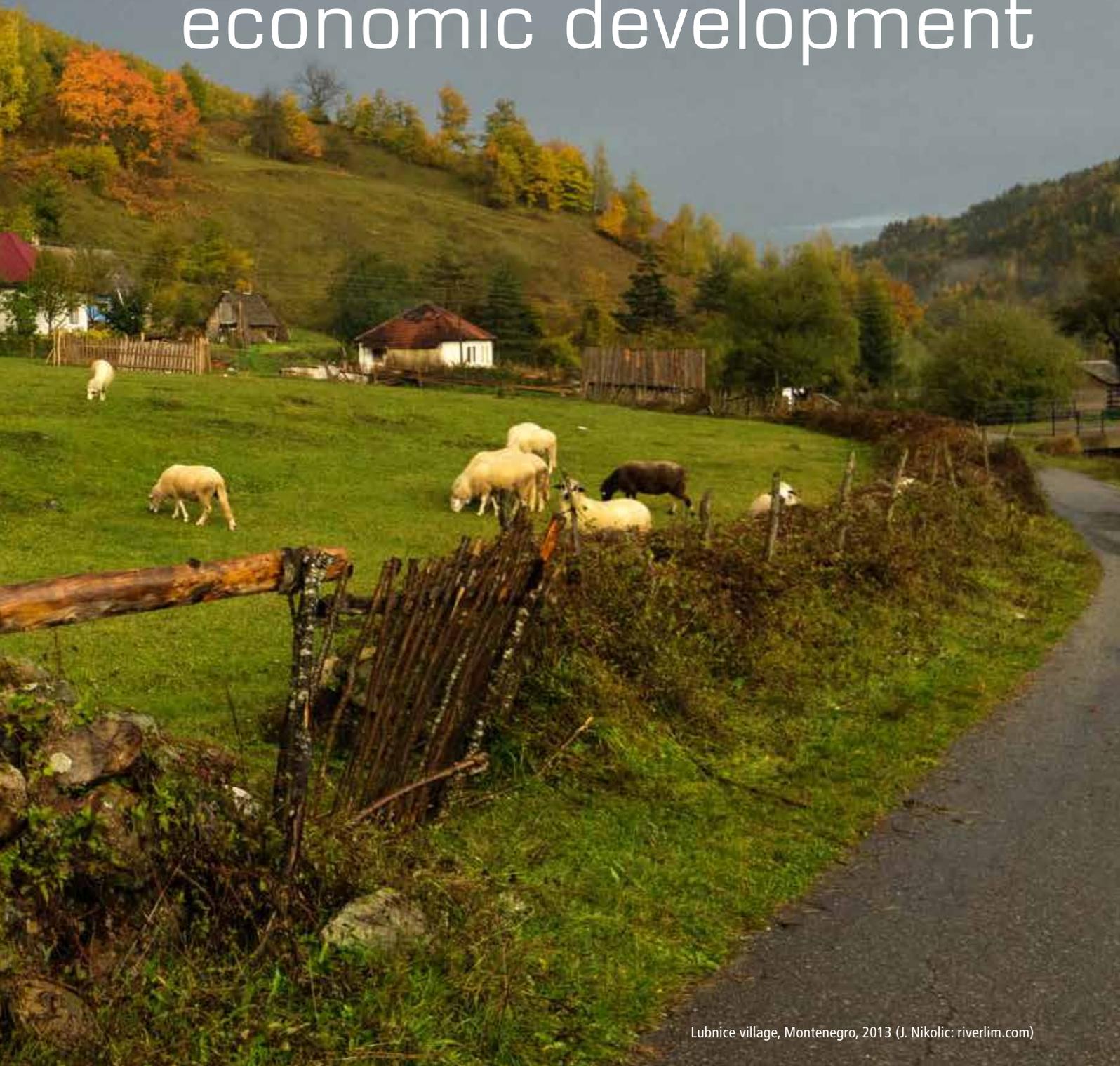


Attractive alleyway, Simikot,
Nepal, 2010 (G. Schneider)



3

Social equity and economic development





Heike Mayer

Introduction

Black Hmong street sellers, Sa Pa, Viet Nam, 2008
(M. Gibert, Paris 1 University)

Developing a sustainable economy is critically important for the viability of mountain areas. Indeed, many mountain communities belong to the world's poorest and most disadvantaged regions. Reducing poverty and increasing social equity are still major challenges, along with increasing opportunities for earning an income. In mountain areas where the economy relies primarily on tourism, a key need is to ensure that the economic benefits that accrue from tourism remain in local communities. Taking a community-based approach to tourism development in mountain areas may not only ensure long-term economic sustainability, but may also help to maintain local cultures and knowledge, leverage local assets, create opportunities for the disadvantaged, and contribute to a more equitable distribution of economic benefits.

Tourism is one of the fastest growing industries in mountain areas. However, many economic benefits of this industry do not accrue to local communities because they do not own and control the key assets. Tourism activities are often seasonal and characterized by unpredictability due to changes in demand, climate, politics and other external factors. This presents particular challenges to communities that rely on tourism as their primary economic base, where a large proportion of jobs are in the tourism industry. On the other hand, tourism offers a variety of economic benefits, and there are numerous examples of how the mainstream tourism industry can engage with local communities and even reinvest some of its profits locally. Overall benefits include direct and indirect employment opportunities, possibilities for developing complementary services and products, often through community-based initiatives, and the creation of economic alternatives to traditional activities, often related to resource extraction.

To ensure that the local population in mountain communities has a share in the economic benefits generated by tourism development, it is important that any such development is community-based. Community-based economic development encompasses efforts that produce assets that, in turn, increase the capacity of local people to improve their quality of life. Community-based approaches to tourism development incorporate a variety of characteristics. First and foremost, tourism projects and entrepreneurial initiatives have to be developed in ways that benefit local people, particularly the most disadvantaged. To allow them



Ecrins Massif, 2012 (M. Dimitrief)



Berner Oberland, Switzerland, 2010 (H. Mayer)

to participate in the tourism industry, projects have to include capacity building and skills training for local entrepreneurs and others who wish to work in the tourism industry. Local businesses should be integrated in the value chains of the tourism industry so that they can benefit from stable demand. A community-based approach also pays attention to a region's cultural heritage and unique assets, so that development projects integrate local knowledge and expertise. This ensures authenticity and recognizes the varied and rich cultures that mountain communities have developed over centuries or longer. Yet, this approach also has some pitfalls. Equitable development is often difficult to achieve because power in many mountain communities is not equally distributed, so that decisions are often taken by the most powerful actors. In addition, local constituencies might have a predominant growth orientation, so that economic considerations prevail over social and environmental goals.



Kayakers on the Durance river, France, 2012 (M. Dimitrieff: micheldimitrieff.com).

The community-based approach to tourism development in mountain communities should go beyond maximizing economic profit to include social, environmental and cultural goals. Such an approach contrasts with many efforts that are short-term and oriented solely towards economic growth. Mountain regions characterized by fragile environments, vulnerable communities, and political uncertainties have, in particular, considerable potential to benefit from a more community-based approach to economic development.



Community-based tourism in the Eastern Pamirs, Tajikistan



Qobiljon Shokirov and Chad Dear

The Eastern Pamirs of Tajikistan have high-altitude deserts, some of the world's highest mountains, and unique natural and cultural landscapes that few outsiders have ever seen. The Murghab EcoTourism Association (META) was founded in 2003, with support from UNESCO, to develop and promote sustainable, community-based tourism in the region.



Deruj castle, Jawshangoz, Pamir, Tajikistan, 2008 (S. Henriod)

In its early years, META functioned primarily as a tour operator. In 2012, it became a largely self-sufficient member-based tourism development agency. Today, META members come from a variety of activities, all based in the Alichur, Murghab, Rangkul and Karakul regions along the Pamir Highway. These include 40 home-stay and 20 yurt-stay operations, 35 tourism transportation firms, and 12 tour guide businesses. Using revenues generated through membership fees and sales of its annual Pamir Highway calendar, META collaborates closely with the social enterprise etc4CA in supporting a variety of training courses, business support services and social programs.

To promote tourism-related economic development, META and etc4CA training courses cover tourism market analysis, understanding and delivering on visitor satisfaction, and maintaining attractive tourism destinations. These two social enterprises also provide direct business support through individual consultations, development and maintenance of web-based tourism resources, and social media marketing. META also purchased a range of camping and trekking equipment, which they rent to local drivers and guides during the tourist season at subsidized rates. Such equipment is neither accessible nor affordable for most small tourism businesses in the remote Eastern Pamirs. This program enables local guides to earn revenue by organizing mountain excursions both efficiently and safely to satisfy visitor expectations.

META social programs aim to directly address poverty and promote social equity. For example, META markets handicrafts, including embroidery, felt carpets, and other felt products via its website and brochures, and encourages tourists to visit



the producers and the shops where the products are sold. Such activities help perpetuate handicraft traditions whilst diversifying economic opportunities for women in the Eastern Pamirs. META social programs also benefit communities as a whole, not only tourism entrepreneurs. Examples include the establishment of village rubbish dumps, improving both the aesthetics for visitors and the health and sanitation conditions for the people living in the villages, and wind-power research to promote access to renewable energy for villages without electricity.

The combination of training courses, business support services and social programs has considerably enhanced the capacity of the local area to receive visitors, contributed to local livelihoods and generally increased social, economic, and environmental benefits for people in the Eastern Pamirs. 2013 was by far the best year for tourism in the region, with more than 2000 tourists, an increase of 50% from 2012. This increase enabled META members to achieve a 72% growth in revenues.



Lake Kol ukok, Kyrgyzstan, 2013 (J. Pabion-Mouries)



Tourists pose with home stay family and guide in front of a yurt in Alichur Valley, Eastern Pamirs, Tajikistan, 2013 (M. Traver).

Cooperatives to support women's emancipation in Morocco's High Atlas Mountains



Wafaa Tizza and Said Boujrout

In the High Atlas Mountains of Morocco, the work done by women is traditionally dedicated to the well-being of the family. Most women have heavy workloads, for which they receive no salary. Since 2000, the Moroccan government and many NGOs have worked together to promote the status of rural women through the creation of women's cooperatives and associations.



Carpets and clouds, Telouet, 2008 (M. Djemme)

Chronology of government initiatives promoting the role of women in development:

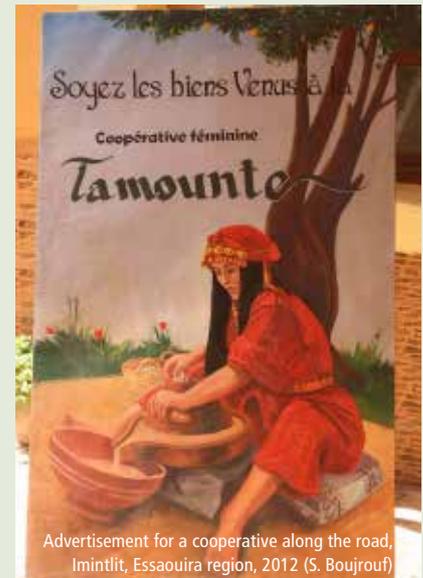
- 1999: Action Plan for the Integration of Women in Development;
- 2004: new *Mudawana* (Personal Status Code which governs family law in Morocco), promoting women's rights;
- 2005: National Human Development Initiative, giving women a key role in the fight against poverty;
- 2008: Green Morocco Plan, promoting the role of women in the protection and enhancement of natural resources.

By the end of 2012, there were 1,213 women's cooperatives, with a total of 25,879 members, across Morocco. There has been a significant growth in both the number of these structures and their members in all of the country's mountain regions, allowing women to become more directly involved in local cultural and socio-economic development. The cooperatives are mainly involved in crafts, such as carpet-making, and the processing of natural and farm products, such as argan oil, walnut oil, aromatic plants, and saffron. Women can also take literacy and foreign language classes at the cooperatives, and receive vocational training. Visits to cooperatives provide a new activity for tourists, who can watch products being made and buy them on-site. When one of the cooperative members speaks a foreign language, she explains the cooperative's activities directly to the tourists. In some cases, these visits are combined with a hike, led by a local guide. These initiatives thus play an important role in the development of tourism in mountain areas.



Women's cooperatives thus provide an opportunity for the beginning of a women's emancipation process. The fact that the women earn an income, albeit modest (the average salary in women's argan cooperatives is 400 to 1000 dirhams – 35 to 85 Euros – a month), that they learn to read and write, that they are in contact with other cultures through the tourists, and that their know-how is recognised by tourists increases their self-confidence and changes their role within their families. Greater recognition from their husbands also means that they participate in family decisions about how to spend the money – for example, on school supplies for their children. This has a positive impact on family life and the education of the children. The women also become more autonomous: as cooperative members, they create an area of freedom outside their homes, a place where they work to strengthen a collective feminine identity.

According to sociologist Hamid Bekkali, the "rural woman is becoming a real player in local development" thanks to these structures. The cooperatives are a fine example of social innovation as part of the process of developing a more sustainable form of development in mountain areas and recognising and promoting local traditional know-how, sometimes through national and international labelling. This creates a clearer and stronger identity for the territory, distinguishing it from others and strengthening the capacities of less favoured groups in society.



Advertisement for a cooperative along the road, Imintlit, Essaouira region, 2012 (S. Boujrouf)

"We rural women were doing very hard work but without monetary remuneration. In our valley, the income I get from my work at the cooperative is important, since it enables me to help my family a little. Since working at the cooperative, I feel a change within me. I'm happier and less submissive with regard to others. I feel strong and have more esteem for myself and for others."

Quote by a member of the Nor association (Asni, Ghyghaya valley, Marrakech region)



Girls at work at "La Maison de la Culture", Imouzzer Tichka, 2008 (M. Djemme, djemme.com)

L'Argentière-la-Bessée, France: from mono-industrial fragility to territorial agility

Philippe Bourdeau

The small town of L'Argentière-la-Bessée, south of Briançon, in the French Hautes-Alpes, has become known for its innovative regeneration since the local aluminium plant closed in 1986. This experience provides useful insights as to how a mountain town faced with a major crisis, can mobilise its resources to develop new activities, attract new inhabitants, and reconstruct both an identity and a vision of the future. **to worsen in the years to come, thereby placing further demands on practices and policy to adapt.**

For almost a century, the Pechiney aluminium plant had been the economic and urban heart of the region. Its closure led to a deep economic, demographic, social and identity crisis: 334 jobs were lost, the population shrank from 2500 to 2000, and the municipal council collapsed since most of its members were managers at the plant. This "end of the world" situation was exacerbated by the failure, less than three years later, of the industrial reconversion plan financed by Pechiney with the support of the public authorities. From then on, thanks to strong leadership from a new and younger municipal council, together with the dynamism of an emerging group of new local economic operators – guides, hoteliers and innkeepers, shopkeepers, publishers – L'Argentière-la-Bessée deliberately refocused its activities on its mountain environment. This approach, embodied in the formula "history, nature, sport", was aimed at making L'Argentière-la-Bessée "the gateway to the high mountains", by systematically taking the opposite course to that of a century of virtual industrial mono-activity and isolation from the surrounding mountains. International ice and rock climbing and kayaking events now take place every year.

This success story, stemming from a "creative crisis", seems to have had a number of driving forces. First, this is an area with an unconventional historical background, beginning with the Vaudoise heresy of the 13th Century and a period of political autonomy in the 14th to 17th Centuries. In the 19th and 20th centuries, national innovations in education began here. In the 1970s, the area had a hippie commune. All of these historical experiences may have stimulated an atmosphere of original thinking. Second, the area's rich and unexploited natural and cultural resources – the gorges and river of the Durance valley, and the rocks, ice, canyons, mining and flora of the Fournel valley – and proximity to the tourist resorts of the

L'Argentière-la-Bessée, 2010 (Éditions du Fournel)



Vallouise valley provided opportunities to develop tourism. Third, local people have shown considerable capacity for innovation, installing, for example, the first French *via ferrata*, finding opportunities to benefit from European Union programmes such as Natura 2000 and Interreg, and joining other groups such as Local Agenda 21 and the “Alliance in the Alps” sustainable development network. Such initiatives were enabled by the local government’s systematic political and financial support for experimental projects implemented by individual entrepreneurs and developers. Finally, local people have long demonstrated a curiosity about their local area and a desire to reflect on and understand the changes affecting it. At the same time, they have sought to assess the meaning of their own actions and how they might best make use of their past experience, by welcoming, for example, student groups and organising over 30 regional, national and international meetings in L’Argentière-la-Bessée.

Some indicators of the redevelopment of Argentière-la-Bessée

- Creation of a Centre of scientific, technological and industrial culture (CCSTI), focusing above all on the region’s mining heritage (exploration, development and opening to the public of silver-bearing lead mines, which provided the basis for the area’s first economic activity);
- Development of climbing routes, several *via ferrata* and a white-water sports stadium over the entire commune;
- Establishment of international sport events (ice-climbing events, Les Ecrins Open climbing events, world cup kayak events);
- Creation of a regional training centre for professional activities related to white-water sports in partnership with the French canoe-kayak federation;
- Intensive internal and external communication on town’s mountain identity: adoption of a logo showing the Barre des Ecrins summit which is the highest point of the nearby massif; installation of the „biggest ice axe in the world“ in front of the Town Hall; systematic reference to the world of mountain sports in naming streets or squares (Edward Whymper street, René Desmaison square...);
- Membership of the „Alliance in the Alps“ sustainable development network.

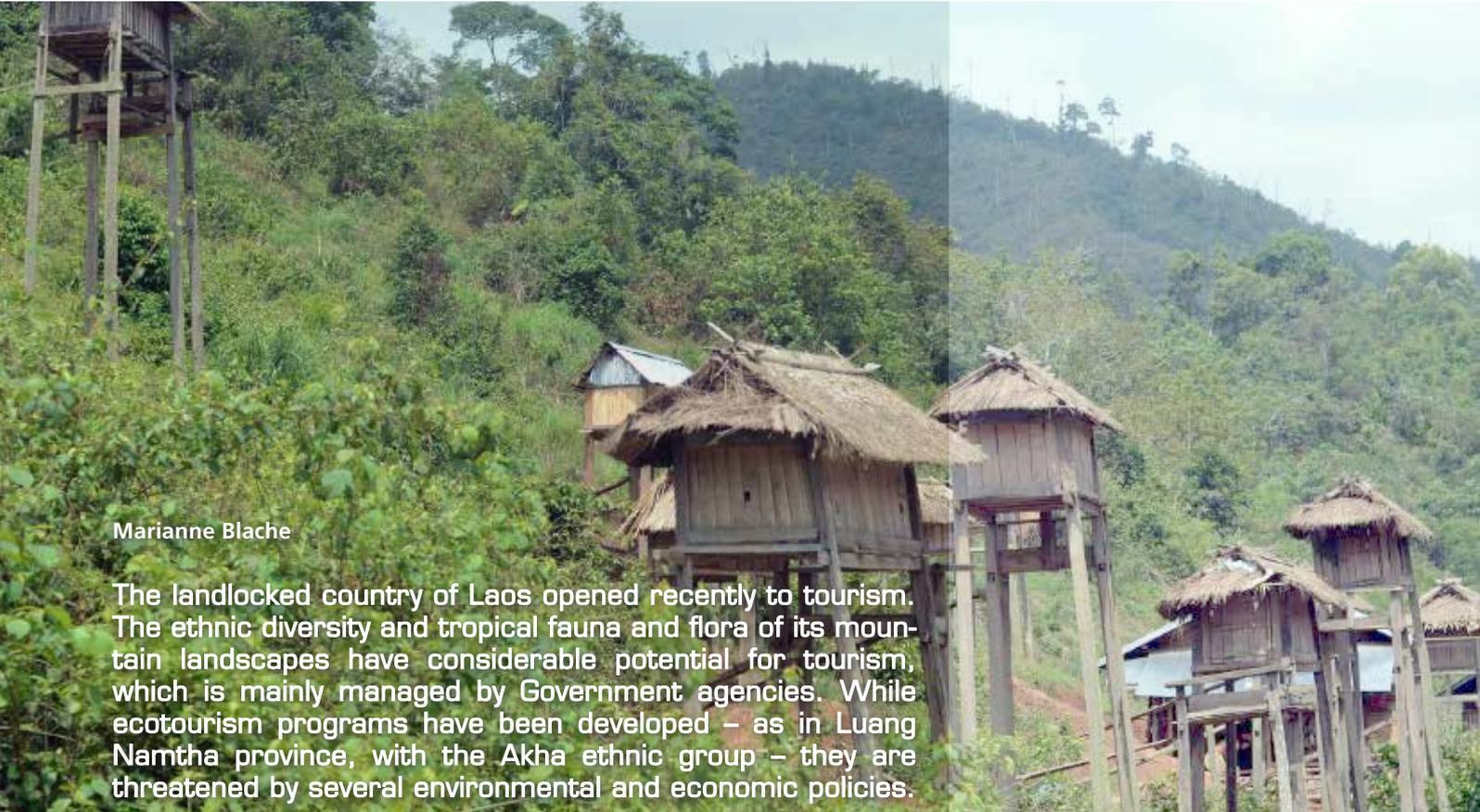


Panel on a street in L’Argentière-la-Bessée, 2007 (P. Bourdeau)



Statue of Whymper, L’Argentière-la-Bessée, 2011 (Éditions du Fournel)

Ethnic tourism failures in northern Laos



Marianne Blache

The landlocked country of Laos opened recently to tourism. The ethnic diversity and tropical fauna and flora of its mountain landscapes have considerable potential for tourism, which is mainly managed by Government agencies. While ecotourism programs have been developed – as in Luang Namtha province, with the Akha ethnic group – they are threatened by several environmental and economic policies.

Luang Namtha province, like the rest of Laos, has a low population density, allowing several ethnic groups to practice shifting cultivation over extensive mountain areas. Their culture and landscapes are attractive for international tourists, and have provided a basis for ecotourism trekking tours organized by the provincial tourism authority and a private enterprise. These tours visit the Muang Sing and Luang Namtha districts, helping to improve the livelihoods of local communities in a province where 58% of the population is considered to be poor.

The Akha village of Ban Nammat Mai, which is a two-hour walk from Luang Namtha city in a National Biodiversity Conservation Area (NBCA), was included in a 3-day tour. Here, the Nam Ha ecotourism project was set up by the provincial tourism authority, the Netherlands Development Organisation (SNV) and UNESCO. Three times a week, up to 12 people came to eat and sleep in a special house, and buy handicrafts. By 2002, 17% of total village income came from ecotourism, which provided at least 10% of the annual income of half of the 26 households. While most of their cash income came from selling cattle and non-timber forest products (NTFPs), and sometimes rice, to people in the lowlands and nearby China, ecotourism had nevertheless enhanced village livelihoods, providing income and skills related to handicrafts and guided tours, especially for the poorest households. In 2005, this development stopped when the village was relocated to the plains of Luang Namtha, as part of a national land allocation program to eradicate slash-and-burn agriculture. The provincial authorities could also no longer allow a village using this system to remain in a protected area. The authorities asked the people of Ban Nammat Mai several times to move down the mountain, offering them a new

Ban Nam Sa, 2013 (Sithisack Paninhuan:
<http://pl.trekearth.com/members/sainamtha/>)



school, electricity and plots for rice paddies. The young people were attracted by the market opportunities that resettlement near a town could offer them.

The costs of resettlement were high. First, all the cattle were sold in order to pay for new houses. Second, incomes were lower because there were fewer NTFPs available; only a quarter of households were able to continue selling these, compared to half before resettlement. There were also no more tours through the village: only one man had an income as a tour guide in the NBCA. Finally, promises from the authorities were not fulfilled: no electricity or land was provided, so the villagers continued to slash-and-burn on former forest plots. Thus, while resettlement may achieve certain goals, such as avoiding expensive public investment in health, education and economic infrastructure in mountain areas, it can seriously jeopardize the potential of ecotourism.



Sayaboury, Laos, 2013 (J. Bastide, Geneva University).

Resettlement program in Laos. The resettlement of mountain villages in lowland areas is being used as a development tool in several provinces of Laos. It is a way of avoiding expensive public investment in providing health, education and economic infrastructures in mountainous areas. At the same time, it is a method of assimilating the culture of the indigenous mountain people with that of the lowland Lao ethnic majority group and a means of exploiting mountainous areas for lucrative activities such as mining and the selling of concessions for rubber plantations, activities driven by foreign (especially Chinese) investment.

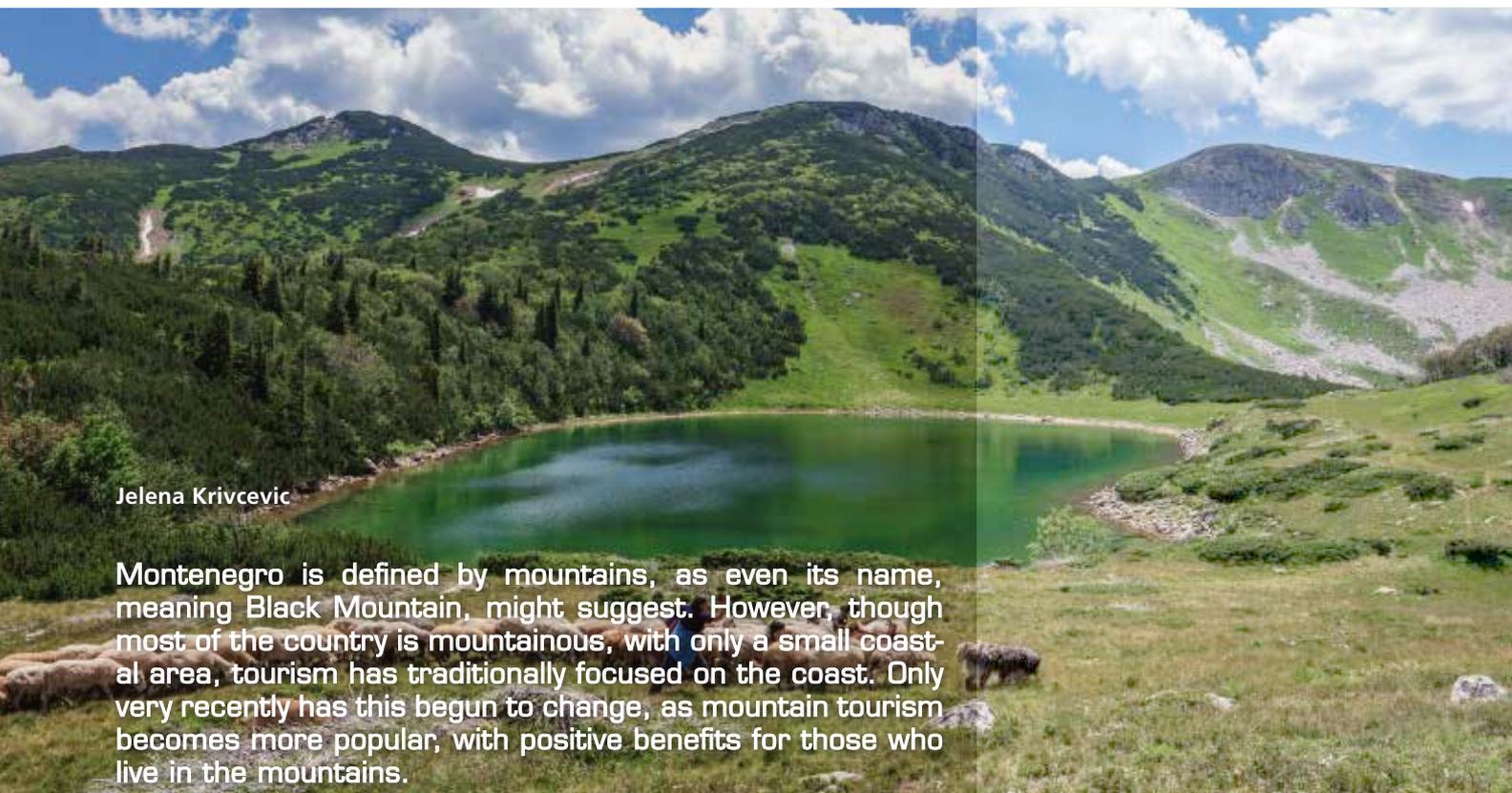
Purpose	Ethnic groups	Nature	Culture	New destination	Handicraft	Food	Others
% answers	68	66	50	44	15	12	13

Purpose of visits to Luang Namtha province. Source: National Tourism Authority of Lao PDR, 2001.



Luang Prabang, 2013 (N. Efrancey)

Agro tourism in the mountains of Montenegro



Jelena Krivcevic

Montenegro is defined by mountains, as even its name, meaning Black Mountain, might suggest. However, though most of the country is mountainous, with only a small coastal area, tourism has traditionally focused on the coast. Only very recently has this begun to change, as mountain tourism becomes more popular, with positive benefits for those who live in the mountains.

This impact can best be described through the experience of the young Kljajic family, from the village of Lubnice in northern Montenegro. This mountainous part of the country is considered underdeveloped, with the highest unemployment rates, weakest growth and mainly subsistence agriculture. Lubnice is located between two national parks in beautiful mountain scenery. In 2011, Mr. Kljajic began the certification procedure for organic honey production. About the same time, the Austrian Development Agency and the Ministry of Tourism began to create new mountain tourism products in this region: initially hiking and biking trails, and then fly-fishing, rock climbing, and agrotourism.

As soon as Mr. Kljajic received his organic producer certificate, and saw the growing number of visitors to his village, he recognized an opportunity for both his family and the whole village. Working with the regional development agency, he became involved in the regional branding of agricultural products, by getting new, well-designed packaging for his honey and organizing training in agrotourism. He decided to restore his abandoned 100-year-old house, and register it as rural accommodation. His family now prepares meals for tourists who pass through their village on their way to the high mountains, provides them with accommodation – a unique experience of staying in an authentic, rural, mountain house – and sells products from their farm. Initially, they did not believe that their household would ever be interesting or attractive for tourists. However, from their experience and through contacts with local tourism agencies, they have become increasingly aware that tourists seek several things: outdoor recreational activities and opportunities in scenic areas, exposure to unique local traditions, food and products. This is pre-

A farmer from Montenegro, 2013
(J. Nikolic: riverlim.com)



cisely what the Kljajic family, their neighbours, and people in other lively mountain villages can offer.

Tourism of this kind is sustainable and does not have negative environmental impacts. It is socially and culturally responsible, preserving local traditions, ensuring higher incomes for disadvantaged groups, and providing employment for rural women. However, the comprehensive development of agro-tourism also requires considerable effort to overcome the suspicions and skepticism of local people. It takes patience, hard work and a clear vision of what is needed to provide appropriate guidance to farmers on tourism, which is usually very new to them. Capacity building, networking and promotion must go hand in hand to ensure success.



A mountain biker on Bjelasica biking trail, 2013 (J. Nikolic)

Foreign tourist overnight stays in the mountainous part of Montenegro.

Though tourism in mountain areas is still not as developed as it is in the coastal part of Montenegro, statistics show that there is a steady growth each year in the number of visits and overnight stays. Moreover, during economic crises the numbers for the coastal region of Montenegro have been observed to slow down. According to the report of the World Travel and Tourism Council for 2013, Montenegro ranks second in the world in terms of the direct contribution of tourism to national GDP, and the forecasts for 2013-2023 are that Montenegro will continue to remain near the top of the list in this respect. This is an important indicator that suggests there are huge opportunities for farmers in mountainous areas to diversify their incomes through the provision of tourism services, the packaging of their products, and direct on-farm sales to visitors.



Traditional products from the north of Montenegro in new packaging, 2012 (J. Nikolic)

Skiing and sustainable tourism in Aspen, Colorado, USA



Linda Giudice, Karinjo DeVore, Rebecca Wallace

Aspen is world-renowned for its skiing and is also a year-round tourist resort. Since 1996, the privately-owned Aspen Skiing Company, which operates four ski areas – Aspen Mountain, Aspen Highlands, Buttermilk, and Snowmass – and owns and operates Little Nell, a five-star resort, has been committed to achieving environmental stewardship along with social and economic benefits.

Aspen Ski Mountain with the city of Aspen at the base of Aspen Mountain and ski area, 2013 (J. Swanson, Courtesy Aspen Skiing Company)

There is no “blueprint” on how to achieve sustainable tourism, but in working towards this goal the Aspen Skiing Company (ASC) has adopted a number of guiding principles:

“We have a collective responsibility to ensure that our company is a rewarding place to work and our community a desirable place to live. We respect and nurture the delicate balance between “resort” and “community” that makes Aspen-Snowmass unique. The combination of our values-based company with unparalleled mountain sports, community, history, culture, and environment gives us a unique market niche. Our goal is to stay in business forever. To do that, we must remain profitable; treat our community well; and operate in a manner that doesn’t harm our local environment”.

In line with these principles, ASC endeavors to generate socio-economic opportunities and distribute benefits throughout the community and beyond.

ASC is a major employer in the Roaring Fork Valley of Colorado’s Pitkin County, providing 869 year-round jobs (836 full-time, 33 part-time) and 2,383 seasonal jobs (1,579 full-time, 804 part-time). ASC also provides housing for up to 590 employees; other employees source housing throughout the valley. A large number of service sector jobs in the valley are indirectly created by the presence of ASC’s business operations. From 1970 to 2000, jobs in service-related industries grew from 3,468 to 16,904, an increase of 387%. ASC also plays an important local philanthropic role, contributing more than \$2.2 million a year in products and services to local non-profit organizations, for example, to help pay local people’s medical bills or



provide lift tickets for disabled military veterans. Almost half the company's employees are members of the Environment Foundation, which has donated almost \$2.5 million since 2006 to support over 400 projects. In addition, full-time employees can take up to 16 hours of paid time off each year to volunteer in the community.

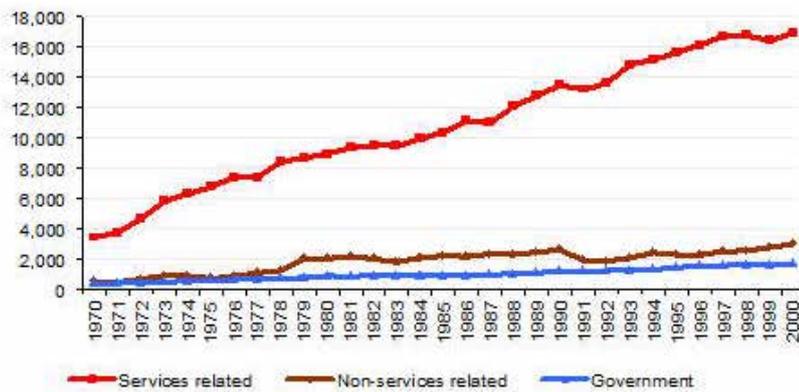
A primary goal for ASC is to foster an environmental ethic and ecological awareness among all of its employees, ski/snowboard area guests, and the surrounding communities. In partnership with the Aspen Center for Environmental Studies, the Forest Service, and the Department of Wildlife, ASC offers a variety of on-mountain educational programs for guests at all its resorts.

While striving to make an important contribution to sustainable tourism with positive socio-economic impacts, ASC acknowledges that it has limited resources and must therefore prioritize initiatives to achieve the greatest and most beneficial impacts on the environment, society, and business. It also recognizes that it needs to continually engage all stakeholders in order to realize further socio-economic opportunities in the future.



Aspen Ski Company Pro with guest, 2013 (J. Swanson, Courtesy Aspen Skiing Company)

Employment by Major Industry Category, Pitkin County CO



Service sector job trends. Source: Employment by major industry category, Pitkin County, CO (1970 – 2000). A Profile of Socioeconomic Measures. Selected Geographies: Pitkin County, CO. Produced by Economic Profile System-Human Dimensions Toolkit EPS-HDT. January 16, 2014.



Snowshoe tour on top of Aspen Mountain, 2013 (D. Bayer, Courtesy Aspen Skiing Company)

Fair distribution of revenues from tourism in the Mount Kenya National Park



Ernst Steinicke, Martina Neuburger

With an average of 25,600 visitors each year, Mount Kenya is one of the least visited national parks in Kenya; hiking and mountaineering constitute only a tiny fraction of the country's tourism. However, in July, the busiest month, more than 5,000 people work as guides and porters in and around the National Park.

Although Alpine tourism is not a significant contributor to Kenya's GDP, the obligation for visitors to be accompanied by a licensed guide and a certain number of porters requires a large labor force. The National Park Authority recognizes the importance of the resulting opportunities for employment, especially as local people lost their access to the forest and its resources when the area was declared a National Park.

Tourism in the Mount Kenya region has been characterized by low levels of visitors whose activities and accommodation have largely been the monopoly of a few commercial tour operators and hotel chains based in Nairobi. Although these companies employ some local porters, such tourism generally contributes little to either the region's economy or sustainable development. However, community-based tourism can stabilize the livelihoods of rural households and contribute to community welfare, as shown by the example of the Guides and Porters Safari Club (GPSC), one of a dozen similar cooperatives around Mount Kenya. Its particularities – a not-for-profit business model and a democratic organizational structure with elected and regularly rotating offices – prevent the inequitable enrichment of a small group of members and ensure that benefits are evenly distributed among all members of the community. Employment as a guide or porter is one of the few sources of monetary income in the region. The earnings are mostly invested in improving the households' human capital, such as in children's education and capacity building for adults. A welfare fund and support for individual members facing hardship further promote social well-being.

This is reflected in the organization's balance sheet, particularly in the high proportion of expenditures paid directly to members in the form of salaries and other

For each visitor to Mt. Kenya National Park, two porters are provided. They carry not only the tourists' personal baggage but also sleeping bags, tents, ropes, and utensils for food preparation (E. Steinicke, M. Neuburger)

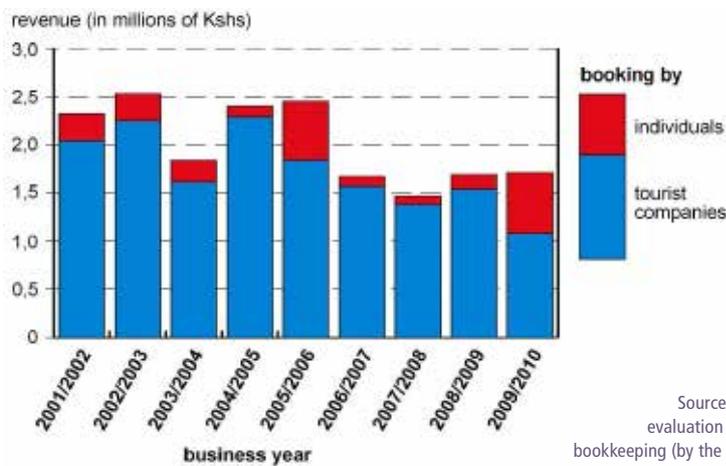


remuneration. Expenses for welfare services have caused the annual expenditures to exceed revenues in some years. As a result, the GPSC remains dependent on "external" support for major investments (e.g. from international development cooperation). Even though this type of tourism helps to trigger empowerment, it involves only a small fraction of total households. A steady increase in members to the current number of 150, combined with a stagnation of tourism, forced the GPSC to cease accepting new applicants.

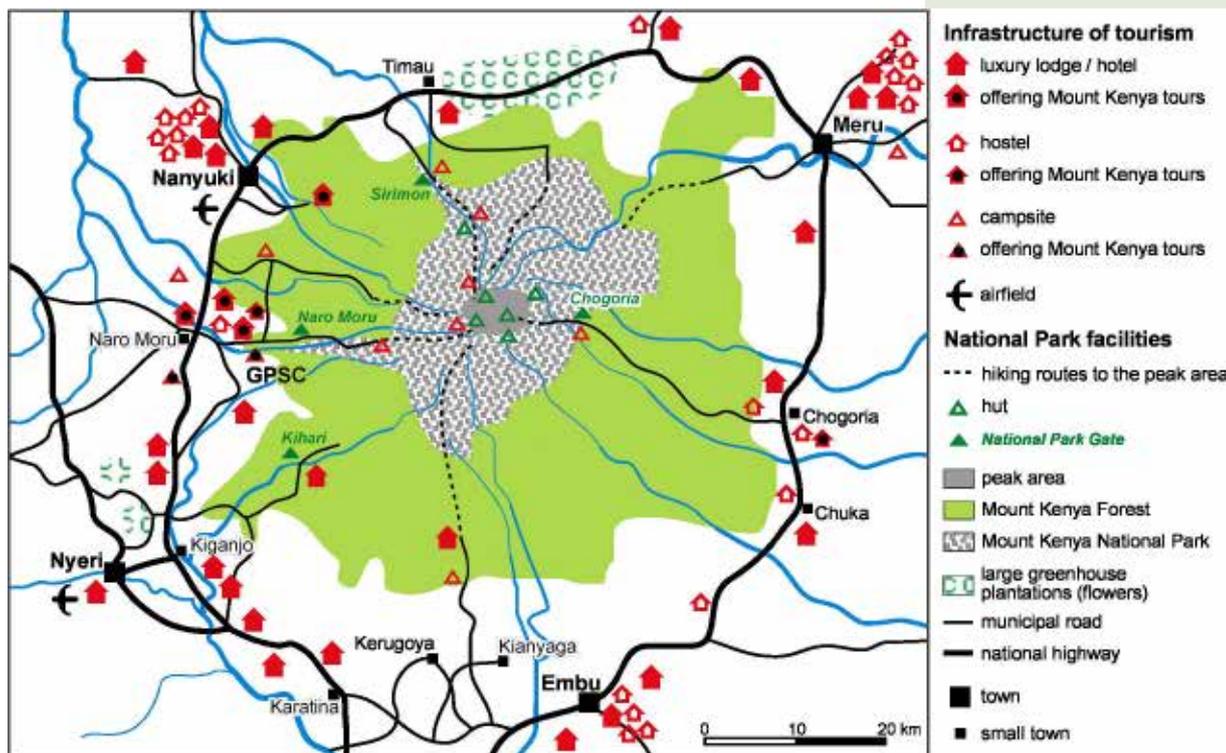
Community-based tourism with integrated democratic decision-making structures and social benefit systems for community members, as presented here, is a model for sustainable tourism. It could certainly act as a spur to sustainable regional development in the Mount Kenya region if visitors utilized this form of tourism directly rather than have their travel pre-arranged by companies in Nairobi. The promotion of community-based tourism through international development aid could therefore eventually contribute to sustainable regional development.

Even though visitor numbers remain relatively small, the manpower requirements of Alpine tourism in African tropical mountain areas are considerably more significant than outside these areas. For example, tourism in the Ugandan Rwenzori Mountains National Park, which accounts for some 1,500 visitors each year, creates approximately the same number of jobs as the Queen Elizabeth National Park, Uganda's largest national park, with over 60,000 visitors per year. Similarly, the Mount Kenya National Park usually employs more than 5,000 guides and porters in July, while the Kilimanjaro National Park provides jobs for as many as twice that number.

GPSC tour revenue by customer type 2001/02-2009/10



Tourism infrastructure in the Mt. Kenya region.





4

Environmental resources and management





Matthias Jurek

Introduction

Terrace paddy fields around Cát Cát village, Vietnam, 2008 (M. Gibert: Paris 1 University)

As our daily lives become faster and more hectic, increasing numbers of people are discovering mountains as places for recreation and spiritual connection. As urbanization and population growth continue apace, mountains – which are often quite remote – are increasingly perceived as among the surviving “untouched natural treasures”, offering attractive landscapes and a wide variety of plant and animal species. From mountaineering to skiing, trekking to climbing, mountain-biking to canyoning, wildlife observation to recreational activities at medicinal mineral water sources and spas, the spectrum of opportunities for mountain tourism is particularly broad.

With the quest for more “untouched areas” comes increasing pressure on mountain environments and the valuable assets they provide, such as water and biodiversity. Tourism is having an increasing impact on mountain environments, causing environmental degradation at different scales, ranging from pollution from waste disposal to the destruction of habitats and the loss of ecological connectivity due to the installation of major infrastructures. The situation is further exacerbated by other challenges such as climate change, which forces the reinvention of tourism and the development of alternative tourism models and solutions. This is especially the case for ski tourism, as the production of artificial snow is becoming increasingly difficult with rising temperatures.

Investing in the greening of tourism can reduce the costs of energy, water and waste disposal and, at the same time, enhance the value of biodiversity, ecosystems and cultural heritage. The creation of jobs can also be a major benefit, as tourism and related travel are very intensive in terms of human resources. There is great potential for tourism to become a major driver for green growth – contributing to poverty alleviation – if sustainable packages, including innovative business models supporting the conservation of environments and their natural resources, are developed. These need, first, to provide revenues and benefits to local host communities and contribute to the reduction of poverty; second, to promote cultural and ecological preservation; and, third, to contribute to awareness creation, capacity building and education based on recognition of the uniqueness of mountain environments and cultures. In particular, the development of sustainable tourism may constitute an



Tongariro National Park, New Zealand, 2010 (M. Collomp: marioncollomp@hotmail.com)



Navacerrada ski station, Guadarrama Mountain Chain, Spain, 2006 (I. Evangelista: ignacioevangelista.com)

opportunity for less-developed mountain regions, with significant potential for realizing various benefits in terms of conservation of biological diversity and sustainable use of its components.

In order to ensure that mountain tourism is sustainable and environmentally-friendly, interaction and communication between all concerned stakeholders is necessary at all levels, including local communities and (foreign) investors, and at all stages, from planning to implementation. Taking the precautionary and prevention principles into account, it is vital to assess and monitor possible direct or indirect, short- and long-term, influences and effects of tourism and related infrastructures on the biological and landscape diversity of mountain regions and to develop adequate measures to avoid, minimize and, where necessary, mitigate negative environmental impacts. These may include “soft-mobility” solutions that are people -and environmentally-friendly. Practical guidance, such as the “CBD Guidelines on Biodiversity and Tourism Development” or “Tourism and Mountains - A Practical Guide to Good Practice” (UNEP,



View of the Aletsch glacier, Lüsga Alp, Switzerland, 2010 (A. Campi: albertocampiphoto.com)

Conservation International and Tour Operators' Initiative), is particularly useful. However, the key foundation for the greening of tourism in mountain regions is destination planning and development and the implementation of adequate legal and policy tools and strategies (in particular, at the trans-boundary level, such as the Protocol on Sustainable Tourism to the Carpathian Convention and the Tourism Protocol of the Alpine Convention) to ensure a coherent and integrated approach, based on the coordination and setting of clear and common principles for tourism development. or "Tourism and Mountains - A Practical Guide to Good Practice" (UNEP, Conservation International and Tour Operators' Initiative), is particularly useful. However, the key foundation for the greening of tourism in mountain regions is destination planning and development and the implementation of adequate legal and policy tools and strategies (in particular, at the trans-boundary level, such as the Protocol on Sustainable Tourism to the Carpathian Convention and the Tourism Protocol of the Alpine Convention) to ensure a coherent and integrated approach, based on the coordination and setting of clear and common principles for tourism development.



Kyrgyz kid near Alichur, Pamir, Tajikistan, 2008 (S. Henriod: www.henriod.info)

The “Lechweg”, a model for nature-based tourism in the European Alps



Dominik Siegrist and Lea Ketterer Bonnelame



Along the Lech River, 2010 (G. Eisenschink, Werbegemeinschaft Lech-Wege)

Unspoiled landscapes are one of the most important assets for mountain tourism. The example of the Lechweg, which connects three regions in two Alpine countries, shows how nature-based tourism can bring added value to a beautiful river valley. The 125 km long trail starts near the tourist resort of Lech am Arlberg in Vorarlberg, and continues through the village of Warth and the Tiroler Lech nature park in the Tyrol. It crosses into Germany and terminates at the Lech Falls in the Bavarian town of Füssen. The Lechweg is the most important visitor attraction of the Lechtal-Reutte nature park, at least in the summer season. Its diverse river landscapes and natural and cultural assets provide visitors with a special experience. Attracting some 10,000 hikers each year, this long-distance trail makes an important contribution to the local economy of the rural regions through which it passes, bringing customers to hotels, guesthouses and local restaurants. Hikers also buy locally produced products.

Despite initial scepticism from the local population in the participating municipalities and regions, the Lechweg has now become a tourist attraction of the highest quality. As such, it is recognized in regional policy-making as an example of a successful cross-border tourism project, linking the Arlberg region and the nature park region of Lechtal-Reutte in Austria with the Southern Allgäu region in Germany. The Lechweg has also stimulated increased cooperation in other fields, such as regional planning and public transport.

Based on the experience of the Lechweg, the European Ramblers' Association developed quality criteria for long-distance trails. The aim was to improve the condition of trails, enhancing security, signage, facilities and infrastructure along them,



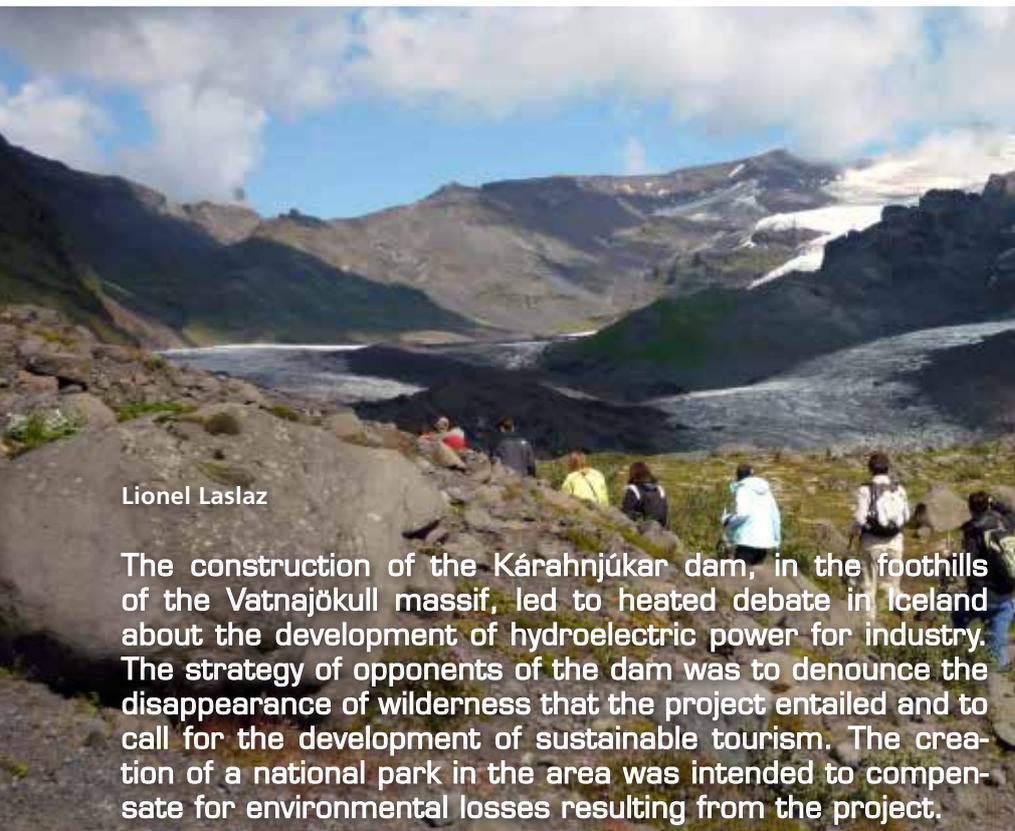
and thus the quality of the hiking experience. Today, these quality criteria are applied throughout Europe. As the first long-distance hiking trail, the Lechweg was certified with the label "Leading Quality Trail – Best of Europe".

In addition, the nature park region of Lechtal-Reutte is one of six Alpine pilot regions within the NaTourCert project, a three-year Alpine project funded by the Bristol Foundation. As part of the project, quality standards for nature-based tourism across the Alps are being developed, tested in pilot regions, and incorporated in tourism policy discussions and planning.



Walkers along the Lech River, 2010 (G. Eisenschink, Werbegemeinschaft Lech-Wege)

Is a dam an obstacle to sustainable tourism in Iceland's mountains?



Lionel Laslaz

The construction of the Kárahnjúkar dam, in the foothills of the Vatnajökull massif, led to heated debate in Iceland about the development of hydroelectric power for industry. The strategy of opponents of the dam was to denounce the disappearance of wilderness that the project entailed and to call for the development of sustainable tourism. The creation of a national park in the area was intended to compensate for environmental losses resulting from the project.



Hiking on the Svinafellsjökull glacier, Vatnajökull National Park, Iceland, 2011 (V. Valfort)

The population of Iceland is very unevenly distributed: while the average density is 3 persons/km², 64% of the population live in and around the capital, Reykjavik. Every year, 1 million tourists cross a near-desert area of 103 000 km² to visit “natural” sites – namely geysers and volcanoes. For tourists, the attractiveness of the country lies more in its isolation – an “ice island” composed of the Earth’s crust on the rift valley of the Atlantic Ocean – than in its cities or its ecology. Of the 105 protected areas that cover 21% of Iceland, the latest national park, Vatnajökull (12 850 km²), is the largest in Europe, not counting Greenland as part of Europe. It was established in 2008 following a process that shook Icelandic society, normally one of the most peaceful and environmentally concerned in Europe.

In 2002, the national electricity company began to develop a major hydroelectric project with a capacity of 690 MW to the north of Europe’s largest icecap, Vatnajökull (8300 km², 70% of the area of Iceland’s glaciers). The power plant, which would increase Iceland’s electricity production by 60%, was mainly to provide energy for a new aluminium smelter at the port of Reyðarfjörður (1100 inhabitants), to be built by the multinational Alcoa. In 2003, work began on the largest construction project ever undertaken in Iceland, the Kárahnjúkar dam, the highest in Europe at 198 m.

The dam and the smelter provoked a fierce social debate between people living in the east – mainly supporters of job opportunities in an economically weakened region – and the residents of Reykjavik, essentially in opposition, led by NGOs. The filling of the reservoir in 2006 led to Iceland’s second largest demonstration ever, attracting some 15,000 people. This environmental conflict opposed two divergent



development strategies: on the one side, those in favour of hydropower development, on the other, proponents of tourism development associated with protected areas. The creation of Vatnajökull National Park was to compensate for environmental losses. It was later extended and placed on the Tentative List of World Heritage Sites in 2011, the aim being to increase its attraction for international visitors. However, even if park authorities emphasize the objectives of welcoming tourists, enhancing environmental education, and increasing economic benefits, there are few visitors – and even these have to be serious hikers. Only the two areas that were already national parks – Skaftafell in the south, Jökulsárgljúfur in the north – before becoming part of the new Vatnajökull National Park are real tourist destinations, accessible by car and offering campsites and other tourist services. Overall, the potential for developing green tourism in this central part of the island is limited far more by the absence of paved roads and accommodation than by the flooding of an area of 57 km² that opponents regarded as “Europe’s last vast wilderness”.



Vatnajökull National Park, Iceland, 2011 (V. Valfort)

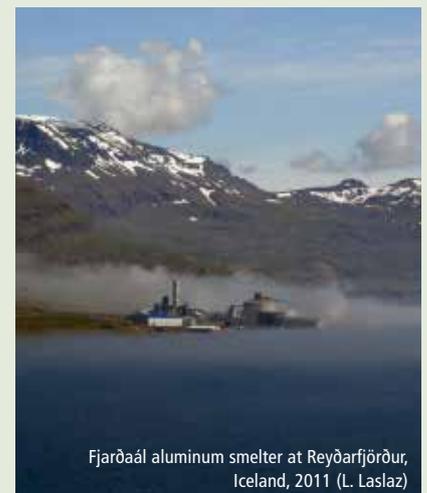
The factory of aluminum Fjarðaál of Reyðarfjörður, property of the group Alcoa, employs 450 employees and produces 346 000 tons of aluminum a year. The aluminum being big consumer of electricity for the process of electrolysis, the hydroelectric potential of Iceland attracts the greeds. The argument was moreover used by the opponents of the installation of this factory, which saw it as a first stage of a vast equipment in dams of the Icelandic streams to satisfy the appetites of multinationals.



Svínafellsjökull, Iceland, 2010 (M. Dupont)

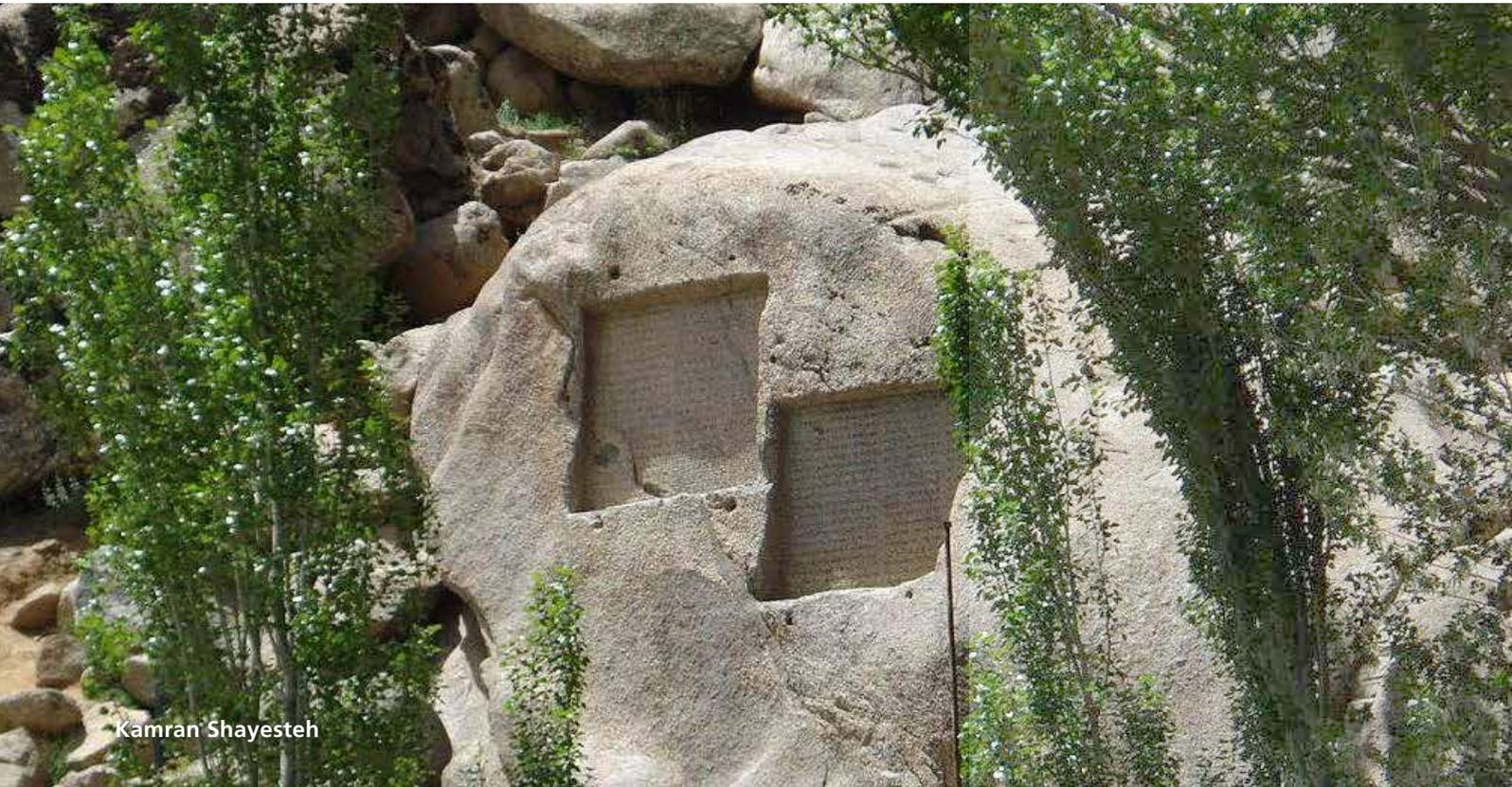


Entrance to Ásbyrgi canyon, Iceland, 2011 (L. Laslaz)



Fjarðaál aluminum smelter at Reyðarfjörður, Iceland, 2011 (L. Laslaz)

Ecotourism carrying capacity in Ganjnameh Valley, Iran



Kamran Shayesteh

Inscriptions carved on the face of the mountain, Ganjnameh Valley, Iran, 2012 (K. Shayesteh)

Hamadan is a beautiful mountain area in western Iran, with farmland in fertile valleys, pastures, and snow-capped peaks. The highest and most famous peak is Alvand, at 3574 m, which rises above the Abbas-abad valley. Two sets of inscriptions carved on the face of the mountain, known as Ganjnameh or “treasure epistle”, ordered by Darius (521-485 BC) and Xerxes (485-465 BC), attract numerous visitors to Abbas-abad, who can also enjoy the gardens, springs, waterfalls, rivers, and the very diverse vegetation.

A key challenge to the sound management of this ecologically sensitive and important recreational area comes from the growing number of visitors, since the resulting pressure on its ecosystems may lead to their degradation and consequent loss of biodiversity. Planning and management of the area therefore requires techniques to evaluate how many people can use the valley’s resources at a given time – in other words, the carrying capacity of the area. Over the past three decades, quantitative methods to derive carrying capacity have been developed and widely applied in a variety of projects. One of these was developed by the International Union for the Conservation of Nature (IUCN) specifically for tourism development, and was applied to the Abbas-abad valley. The first stage showed that 2478 ha of the valley’s 4000 ha has potential for ecotourism. Next, the physical carrying capacity of these parts of the valley was calculated, based purely on the time and area that every visitor needs and will be satisfied with, resulting in a figure of 3,429,557 people per day. A third stage was a survey of the ecological limitations of the valley, which showed that altitude, soil depth, density of vegetation cover, rock strength, and soil erosion are the main criteria affected by the presence of visitors. Once the

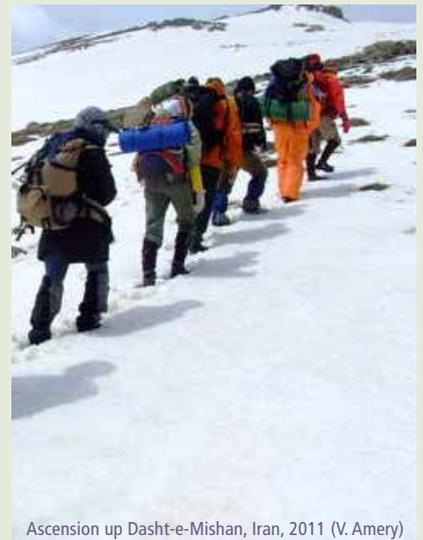




Sheep herd, Ganjnameh Valley, Iran, 2010 (J. Hassanzadeh)

areas subject to these limitations were defined, the real carrying capacity could be estimated. The results obtained indicated that for recreation in the valley to be sustainable a maximum of 34,813 visitors per day could be allowed, which is much less than the current level of use, especially in spring and summer.

Carrying capacity estimates for a recreational resource can thus be used as a basis for monitoring whether the levels necessary for the structural and functional integrity and health of the ecological systems are being maintained, and whether the different ecological processes are in equilibrium over the long term. The figures therefore provide valuable input for decision-makers and planners in their efforts to ensure that visitors have a high-quality recreation experience that can be sustained.



Ascension up Dasht-e-Mishan, Iran, 2011 (V. Amery)



Crown Imperial, Ganjnameh Valley, Iran, 2012 (K. Shayesteh)

Integrated water and tourism management for a resilient Himalayan region

Madhav Karki

The Himalayan region – a global tourist destination and the water tower of Asia – is facing tremendous stresses due to climate change and globalization. Measures to meet these challenges, such as integrated water and tourism resources management, are urgently required to minimize the risks to the booming tourism industry and to the water, food, and energy security of nearly 1.5 billion people dependent on Himalayan ecosystems and the water flowing from them.

The beauty and grandeur of the Himalayas have always attracted visitors, from pilgrims to modern tourists. Known as the “water tower” of Asia, the region is facing tremendous stresses due to climate change, impacting on both the tourism and water sectors. Tourism is vulnerable due to increases in avalanches, landslides and floods that create new risks for visitors. In 2013, unpredictable floods killed more than 6,000 pilgrims in Uttarakhand, India. Hundreds of glacier lakes resulting from melting ice have also added risks of flash floods. Tourism could also be affected by a future lack of water. Scientists have predicted that some 40 percent of the 1.5 billion people living in the Himalayan countries could face severe water shortages due to climate change, with widespread implications for food, energy, water, and health security.

In thousands of Himalayan villages, where booming tourism and persistent poverty co-exist, there are telling signs of water shortages and environmental degradation due to unplanned development. As the number of tourists in Ladakh, India, has increased, the authorities have required visitors to carry buckets of water from lower sources to cope with acute water scarcity. The glaciers that supply about 300 million cubic feet of water a year to the 10 great Asian rivers during the dry season are melting fast, which will make areas with water deficits more vulnerable. The expanding tourism industry is one of the major users of fresh water in the mountains, creating huge demand and increasing the vulnerability of local ecosystems and communities. Drinking water has become a valuable “market commodity” and must therefore be managed wisely, along with other resources, including tourism, on which livelihoods depend.

Tourists observing Annapurna Range in Pun Hill, Kaski, Western Nepal, 2013 (J. Bajracharya)

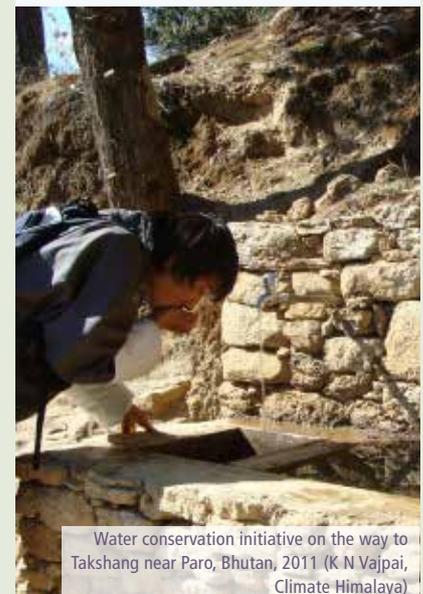


Lessons learned

- Globalization, climate change and environmentally unfriendly tourism are impacting on the pristine Himalayan landscape;
- Climate change will impact on water, food, energy and transportation systems with serious implications for the tourism sector;
- Himalayan region requires sustainable tourism that meets the needs of tourists as well as those of the host region, while at the same time protecting the natural environment for humanity; Synergy from more integrated water and tourism management strategies can promote greater security with respect to water supplies, the environment, and the livelihoods that depend on them, and at the same time contribute to UN Sustainable Development Goals.



Integrated management approaches are needed to provide long-term solutions to the looming water crisis, which would increase both health and physical risks for the growing numbers of tourists, and widespread local poverty. Integrated water resources management (IWRM) provides a recognized framework for managing limited water resources by promoting the coordinated development and management of water and other ecosystem resources, and enhancing economic and social wellbeing based on the principles of sustainable development. For the many trans-border Himalayan rivers, IWRM needs to be promoted at the basin scale, which will also address the hazards resulting from climate change that affect tourism. Locally, some Himalayan communities are showing the way and are deriving benefits. Entrepreneurs in Ladakh have developed water-harvesting methods by storing water as ice, while farmers in North Pakistan have resorted to an indigenous technique of glacier grafting where ice is grown in shaded cavities. Both techniques have been developed and incorporated into local water management systems, thereby improving water supply. To make both the water and tourism sectors more climate-resilient and sustainable, and thereby ensure the livelihoods that depend on them, these sectors need to be managed together in an integrated manner.



Climate protection in tourist destinations – now!



Peter Niederer, Susanne Kytzia, Roger Walser and Dominik Siegrist

In recognition of the considerable vulnerability of tourism to climate change, and of tourism's own role in contributing to this change, a partnership of NGOs, universities and stakeholders representing five tourist destinations in the Swiss Alps has initiated a project aimed at reducing CO2 emissions in these destinations and promoting the activities used to achieve this reduction for marketing purposes.



The Blatten-Belalp funicular railway, Naters, Switzerland, 2010 (A. Campi: albertocampiphoto.com)

Climate change is one of the greatest challenges facing mankind today, and mountain areas are particularly affected. Since 1900, temperatures in the Alps have increased at a rate that is almost double the global average. Observed consequences for tourist destinations include higher snow lines and the shrinkage of glaciers. These trends represent serious challenges for tourism. On the other hand, global tourism is itself responsible for annual emissions of about 1,307 million tons of CO₂, representing 5% of global emissions. Ideally, the tourism industry should aim to minimize its impacts on the climate system and demonstrate its adaptability to climate change by creating attractive new tourism products. The project "Climate protection in tourist destinations – now!" tries to achieve these goals. The three core elements of the project, and the lessons learned, are explained below for two of the five destinations, Sattel (Central Switzerland) and Braunwald (Eastern Switzerland).

Development of a strategic framework. In Sattel, the partnership of NGOs and universities, working with representatives of the municipal council and local tourism service providers, developed an integrated tourism strategy, including measures aimed at carbon-free tourism, which was approved by the local population.

Calculating the CO₂ footprint. In Braunwald, a CO₂ footprint was calculated, involving an assessment of all the carbon emissions associated with a tourist business, service or product. This revealed that for the 2600 tons of CO₂ emitted in the tourist sector, second homes account for 1477 tons and thus have by far the greatest potential for carbon reduction measures. The municipality is now more committed to energy-efficient renovation and building.





Electric vehicles are carried by cable train to the Climate Fair in Braunwald, 2013 (P. Niederer)

Product development. The project initiated an annual climate fair in Braunwald, which became a meeting point for not only tourists and locals, but also entrepreneurs in the fields of renewable energy and electro-mobility. The visitors were invited to use a number of innovative electric vehicles to discover, as they moved around the village, different interpretive stations, such as renovated zero energy chalets and a recycling workshop for children. In collaboration with the project partnership, Sattel is setting up a climate audio trail to inform visitors about the impacts of climate change via their smartphones.

Most tourists have already heard a lot about climate change and do not need more figures and facts, but attractive tourism products that convey a climate message in a way that is easy to assimilate can prove effective. Climate-friendly tourism offers may not attract many more tourists, but can help a tourism destination define its position in the market. However, this works only if CO2 reduction measures are part of other activities or processes that target sustainable development. Tourism has great potential to foster societal change. Thus, if climate messages are conveyed in an effective manner during a holiday, visitors may act more responsibly in their daily lives.



Sign along hiking path, Belalp, Switzerland, 2010 (A. Campi)

The partnership of the project “Climate protection in tourist destinations – now!” is under the leadership of the Swiss section of the Alliance in the Alps network and comprises the Institute for Construction and the Environment (HSR), the Institute for Landscape and Open Space (HSR), the Institut für Tourismus und Freizeit (HTW), and the NGOs Myclimate and Climatop. Five tourism destinations are also taking part: Braunwald, Rigi, Saas Fee, Sattel and Tourismus Engadin Scuol Samnaun Val Müstair (TESSVM). The project is financed by the Innotour Programme of the State Secretariat for Economic Affairs (Seco).

The Virungas: a case study of mountain tourism and biodiversity in East Africa



Sam Kanyamibwa, James Hogg and Salome Alweny

Eastern Africa's mountains host a rich biological diversity and provide high levels of ecosystem services, including tourism. The two most popular tourist destinations in East Africa are Mount Kilimanjaro and the Bwindi-Virunga region. The latter is famous for mountain gorilla tourism, which although generating considerable income, does not necessarily bring benefits to local people.

The Bwindi-Virunga landscape is very fertile and particularly favourable for agriculture. This has led to a high population density (up to 800 people/km²), a high growth rate (2-4% per year), and severe poverty levels. The region includes three national parks – the Virungas (DRC), Volcanoes (Rwanda), Mgahinga and Bwindi (Uganda) – in which settlement is not permitted. Gorilla tourism has largely saved both the parks and the gorilla because tourism revenues account for a significant percentage of national GDPs. Consequently conservation is supported by the trans-boundary management agreement of the Greater Virunga Executive Secretariat, signed in 2004.

A key benefit of gorilla tourism in Rwanda and Uganda is the central collection and redistribution of permit fees paid by tourists. Gorilla tourism has provided environmental education and common services to local communities, contributing to economic development and well-being, and reducing human pressure on large areas of gorilla habitat. Other benefits include improvements to the road network, as tourists want easy access to observe the gorillas, various income-generating activities, such as handicrafts sold to tourists, and community-owned tourist lodges. However, gorilla tourism is not without environmental costs from the construction of paths, roads and hotels. There is also the risk to gorillas of disease from human contact.

A growing problem is that a significant portion of tourism revenues, such as permit fees or private sector profits, do not have to be invested in or around the parks, or on conservation or improving sustainability. Though tourism revenues benefit national economies, people living near the parks remain poor. They do not receive

Mountain gorilla family, 2012 (J. Hogg)





Virungas landscape, 2003 (S. Kanyambwa)

direct cash benefits from tourism revenues and most do not see common services as of immediate benefit. The community lodge model is imperfect, as significant profits go to a foreign-owned management company. These factors can lead to resentment and a failure to respect the National Park boundaries, as shown by continued illegal activities, while outside the parks, serious conservation and development challenges remain.

Another risk arises from the heavy dependence on tourism revenues. If conservation is intrinsically linked to tourism, changes in revenues could have marked effects. For example, civil conflict can reduce tourism revenue to zero, and poor decision-making – such as allowing oil exploration and unsuitable developments in or near the park – can affect the credibility of conservation measures and the ecotourism on which they are financially reliant. Yet relying on a single species has brought many benefits: the link between gorillas and national economies is such that their conservation is sure to continue. Conservation efforts, however, can be improved by working towards regional peace, with the re-opening of the Virunga National Park (DRC), transparent public accounting, the equitable investment of revenues close to the park, open dialogue between all stakeholders, and managing local communities' expectations and making them more sustainable and resilient.

Cash Cow?

In 2012, Rwanda received 28,483 visitors for gorilla tourism each paying roughly \$500 for their permit, generating some \$14m in the region.

2013, A-M Weeden wrote: "the Rwanda Development Board revenues have almost doubled in the last five years and tourism now accounts for 7.8% of Rwanda's GDP".

In Uganda, approximately 80% of the National Wildlife authority's overall budget comes from gorilla tourism. The World Wildlife Fund has recently estimated that each gorilla brings in USD \$1 million in revenue each year for Uganda (<http://news.mongabay.com/2013/0513-weeden-gorilla-tourism.html#Le9eV5r1H5OJdhZD.99>).



Gorilla tourism, 2012 (J. Hogg)

The emergence of sustainable tourism in Daisetsuzan National Park, Japan



Teiji Watanabe



Mount Asahi-dake, Daisetsuzan National Park, Japan, 2003 (T. Watanabe)

Daisetsuzan National Park, on Japan's northernmost island, Hokkaido, is Japan's largest national park, with an area of 2309 km². It has various types of geotourism resources, such as active volcanoes, permafrost, periglacial and glacial landforms, and wetlands. In recent years, there has been a gradual but steady change from extensive mass tourism to more sustainable tourism.

As more than 70% of Japan is mountainous, many of its major tourism destinations are in mountain areas, particularly in protected areas such as national parks, quasi-national parks, and Natural World Heritage Sites. Recently, Japan has joined UNESCO's Geopark network: Hokkaido now has one UNESCO Geopark and four Japanese Geoparks. One of these is the Tokachi-Shikaoi Geopark, established in the eastern part of Daisetsuzan National Park in December 2013.

Various kinds of tours utilize the natural resources. Higashikawa Town, in the northwest of the park, for example, is active in promoting sustainable tourism. Thus, a local mountain guide and town officials offer a tour to learn about trail degradation, in which participants measure trail erosion and learn how it is influenced by vulnerable volcanic deposits and snowmelt water. Another example is a "monitoring tour" of phenological changes in alpine plant communities, which has been conducted by academics, local mountain guides and "Flower Research Volunteers" for more than a decade. Quite a large number of brown bears inhabit many parts of the park, including landslide areas. The Brown Bear Information Center in Kamikawa Town, in the northeast of the park, promotes educational tourism by providing information on the bears.





A local guide interprets scratches left by a brown bear on the bark, Daisetsuzan National Park, Japan, 2006 (T. Watanabe)

The focus on summer-oriented tourism resulted in local concerns about the seasonal nature of income from park activities. The trend now therefore is for park tours to become more diversified both seasonally and spatially. The Sugatami-no-ike Lake area, below the summit of Mount Asahi-dake, is one of the busiest year-round destinations, with winter snowshoe tours attracting numerous visitors. Visitors have access to the whole area, including the active fumarole near Mount Asahi-dake, which cannot be visited when there is no snow. It is expected that the establishment of Tokachi-Shikaoi Geopark will lead to increased geotourism in the area. Future geoparks within the National Park will increase the range of tourist opportunities both spatially and temporally, requiring more local mountain guides and creating more stability in the local economy.

Despite the growth of ecotourism, mass tourism – mainly in summer – continues to dominate use of the National Park. This seasonal concentration has created serious trail erosion and human waste issues. The Ministry of the Environment, which is responsible for Japan’s national parks, has recently started discussions on park management, particularly relating to trails, with tourism stakeholders – including local communities, local administrative bodies, and environmental NGOs. The establishment of the Tokachi-Shikaoi Geopark and possible future geoparks means that local community-based approaches to park management will become even more important in order to ensure the sustainability of both the local communities and the resources on which geotourism depends.

Brown-Bear Information Center and its hiking course.

Brown-Bear Information Center is located near the entrance of a 7-km hiking trail, which has been developed on landslide topography with many small lakes. This situation favours the growth of various kinds of vegetation and provides brown bears with a good habitat. The center was built by the Ministry of the Environment and is maintained by the local township of Kamikawa. All visitors to the hiking trail have to visit the center to receive basic information on the brown bears inhabiting the area. Encountering brown bears at close range is rare because officers at the center continually patrol the trail and may even close part of it depending on the bears’ movement patterns.



The Brown-Bear Information Center, Daisetsuzan National Park, Japan, 2003 (T. Watanabe)



5

Policies and social institutions for sustainable mountain tourism





Daniel Maselli

Introduction

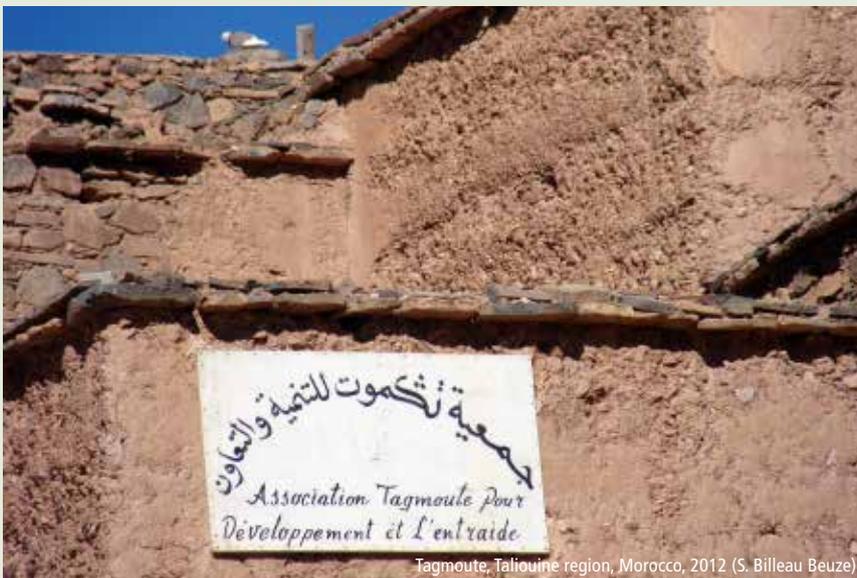
Ballenberg, Switzerland, 2008 (A. Campi: albertocampiphoto.com).

Many mountain regions of the world have already become tourist destinations, while others, not yet on the tourist map, harbour prospects of tourism-based benefits and high expectations for future development. Experience tells us, however, that natural assets such as scenic landscapes or snow-covered slopes cannot alone guarantee the growth of tourism. In mountain areas, as elsewhere, tourism development is often the result of initiatives by a diverse array of actors ranging from impromptu merchants and restaurateurs, craftspeople who adapt their production to new clientele, to large investors and businesses. On the one hand, this multiplicity of initiatives is often a prerequisite for sharing the benefits of tourism; on the other, it may also threaten the very stability of the sector if it is not subject to some degree of regulation or coordination. The local political and institutional context must therefore be conducive to sound tourism development, with appropriate strategies, policies and institutions to ensure that any tourism potential can be realized. The establishment of an enduring tourist economy, especially if sustainability is envisioned, requires a degree of institutional regulation, even if such constraints may not be welcomed by every participant in the emerging sector.

Such regulation should apply principally to shared resources. These play a critical role even in societies where privately held land predominates, because tourism always relies on common goods —such as the landscape or heritage assets— and requires the availability of common resources, such as water or snow. Given this context, the sustainability of tourism depends greatly on the existence and efficacy of social institutions and public policies capable of establishing rules for managing common resources and assuring the appropriateness of private initiatives.

Traditional mountain societies are often marked by a high degree of institutional and social regulation. They may have inherited this characteristic from the need to collectively manage forests and alpine pastures, or from a common exposure to natural hazards and environmental constraints. Tourism development in mountain areas often follows the contours of established forms of social regulation, particularly with community-based tourism, as evidenced in the mountains of Oaxaca, Mexico. In many regions of the world, however, traditional forms of shared resource management have been severely weakened by the legacy of colonization, processes of modernization and the monetization of the local economy, and the trend to privatize common goods. Furthermore, tourism development, even when non-intensive, can disrupt or subvert traditional mechanisms for managing shared resources, as can be seen in the example of Sa Pa, in Vietnam.

In this context, a key to regulating tourism development rests in the hands of states and government administrations. When acting in a top-down fashion and imposing conditions for tourism development, states have often weakened local institutions and forced access to resources.



Tagmoute, Taliouine region, Morocco, 2012 (S. Billeau Beuze)



Sequoia National Park, California, USA, 2008 (S. Billeau Beuze)

This has been the case in certain instances in the south of China and in the highlands of Vietnam. At times, the state stands in for local institutions, compensating for their fragility and limited capacity to project administrative power, as can be seen in some rural areas of Turkey. And finally, the state can work to strengthen local institutions, as is now being seen in Morocco. There, rural municipalities had been created to replace Berber tribal authority in the Atlas Mountains. However, a need was perceived for more endogenous development, including initiatives that highlight local Berber culture. In this context, local tourism development associations are being encouraged as a means to renew local governance and promote economic development. The role of the state can be critical in imposing a level of regulation and constraint on local actors who otherwise may be tempted to engage in a spiral of unchecked development, a prospect that threatened the Swiss canton of Valais. In Costa Rica, the state has adopted a national vision giving prominence to tourism assets, particularly biodiversity and the nation's luxuriant tropical landscape, while at the same time establishing instruments to guarantee their protection and careful use.



Lagunas Altiplanicas, Chili, 2013 (M. Collomp: marioncollomp@hotmail.com)

Where states are weak or ineffective, the goal of strengthening local institutions for managing tourism resources and activities has been promoted largely by NGOs, agencies for international cooperation, and a range of intergovernmental entities. The goals of empowerment and capacity-building, advanced by these institutional actors, are often shared by local populations, as well as local and regional governments, eager to meet the challenges of tourism development. It is rare, nonetheless, that the positions of local actors, tourism businesses, government administrations, and NGOs are able to truly and fully converge. Tourism development is most often an area of conflict, subject to competing rationales and interests. And when there are marked differences with other sectors, for example extraction industries that may have designs on the same scenic resources as tourism, or when the terrain for tourism is overtaken by geopolitical conflict, as in the Sahel or the Caucasus, the goals of sustainability and tourism development may prove altogether elusive. Furthermore, in most cases, even the success stories involve trade-offs between competing interests and visions.



Cairn at Koitezek Pass, Tajikistan, 2008 (S. Henriod).



Souleymane, a Tuareg guide, on the crest of the first dune of the Ténéré, bordering Tamgak massif, Air, Niger, 2006 (A. Morel)

Networks, fair trade, and sustainable tourism: a growing trend in the Atlas Mountains of Morocco



Mahjoub Bajja, Annie Lauvaux et Mari Oiry Varacca

In the Moroccan Atlas mountains, the involvement of tourism stakeholders in regional, national, and international networks, although recent, seems to be a key step in developing more sustainable and more responsible tourism with local inhabitants, whose identity and cultural continuity is seen as an integral part of development.

Weavers in Aït Youss Valley, Taliouine, 2011
(H. Friry: tissehelene@yahoo.fr)

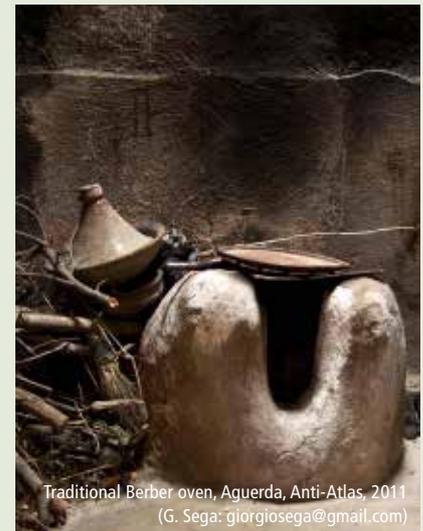
Over the past decade, actors in the Moroccan tourism industry have been forming partnerships with French tour operators aspiring to offer an alternative approach to mass tourism and who have grouped together in networks such as the Association for Fair and Responsible Tourism (*Association pour le Tourisme Equitable et Solidaire* - ATEs), which promotes guidelines for responsible tourism for both visitors and hosts. Thus local stakeholders, for example in the Anti-Atlas mountains, have enlisted the help of such networks. In Taliouine, a marginalised region that until recently benefited only from incidental visits from tourists in transit between Agadir and Ouarzazate, or from the regions' single trekking circuit, local actors are trying to develop quality tourism highlighting traditional knowledge, farming, and crafts. *Migrations et Développement*, an NGO created by Moroccan immigrants to France who are seeking to improve living conditions in their region of origin, has established a network of hostels and even a tourist product: the "Safran country". This NGO, a member of ATEs, collaborates with *Maroc Inédit*, an association based in Taliouine which organizes custom-made trips based on the unique features of the region, and the discovery and appreciation of local identity. This association participates in several international networks promoting sustainable tourism in the countries of the Global South, taking part, for example, in the organisation of the International Forum on Responsible Tourism, which took place in Morocco in October 2012.

International networks for alternative tourism are helping Moroccan stakeholders to both find new customers and reflect on their professional practices. These collaborative arrangements may, however, lead to an overdependence on foreign tour operators. This is why, in 2011, *Maroc Inédit* helped create the Moroccan Network



of Responsible Ecotourism (*Réseau Marocain d'Ecotourisme Solidaire - RMES*). For their founding members, the national scale is a more appropriate level for Moroccan stakeholders to share their experience and to define endogenous alternative tourism models.

Maroc Inédit is at the intersection of several networks at different scales and has sought to promote interchanges, as they provide important windows on the outside world for local actors. Thus there is now an exchange between a valley of the Cevennes, in France, and a valley of the Siroua massif in Morocco, on the transmission and preservation of traditional knowledge of aromatic and medicinal plants. The effort has enjoyed the support of the Mediterranean Agronomic Institute (*Institut Agronomique Méditerranéen*) and the network of Agroecological Initiatives (*Réseau des Initiatives Agroécologiques au Maroc - RIAM*), in Morocco, and the fair trade network of the Provence-Alpes-Côte d'Azur region of France, which helps market locally produced Moroccan goods in France. Enriched by these exchanges, and responding to growing interest, the Association has set up thematic tours giving European and Moroccan visitors the opportunity to discover this rich complex of local traditional knowledge and practices. In these ways, *Maroc Inédit* is working to promote two distinct but mutually supportive aims: the creation of novel tourist products—such as “Safran Country”—and the growth of marketing opportunities for traditional botanical products and crafts.



The success of the state and local people in the development of sustainable mountain tourism in Turkey



Mehmet Somuncu

Pokut Yayla, Eastern Black Sea Mountains, Turkey, 2003 (M. Somuncu)

The Eastern Black Sea Region in the north-eastern corner of Turkey is characterized by mountains and limited agricultural activities. For a very long time, animal husbandry and transhumance were the most important economic activities, but more recently there has been a marked increase in rural tourism, especially since the 1980s. Traditional seasonal settlements in mountain pastures, known as *yaylas* (singular: *yayla*), formerly used essentially in the summer to tend herds, are now being increasingly frequented for summer recreation and tourism.

In the 1990s, a period of increased investment in tourism infrastructure, the Ministry of Tourism began promoting rural tourism in *yaylas* and, in this context, 16 *yaylas* were declared “tourism centres” by the Council of Ministers. The Ministry of Tourism has encouraged tourism companies to invest in these *yaylas*, and today a large number of *yaylas* in the Eastern Black Sea Region have been transformed into tourism centres, with still others planned.

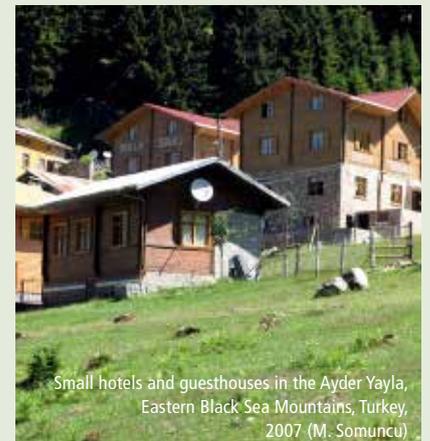
The Ministry of Culture and Tourism sees the development of sustainable rural tourism and ecotourism in the Eastern Black Sea Region as a strategic objective, referring to this mountainous region as the “Corridor of Yayla Tourism” and highlighting the goals for the region in its planning document, Tourism Strategy of Turkey 2023 (Ministry of Culture and Tourism, 2007). As recreation and tourism demand has increased in the *yaylas* of the region, so has the need for tourism related businesses and services. Improved access to the *yaylas* is also contributing to the growth of *yayla*-centred tourism.





The Kaçkar Mountains National Park in the Eastern Black Sea Region, 2010 (M. Somuncu)

Sustainable rural tourism in the *yaylas* has provided new sources of income for villagers, and new kinds of work related to this service-based sector. The employment of women is another positive impact related to tourism. Associated with the development of *yayla* tourism, local women have begun to work in tourist enterprises belonging to their families. Thus, the role of women, previously largely confined to housework and agricultural activities, has been enlarged. The development of sustainable rural tourism in the remote mountainous northern regions of Turkey can make a significant contribution to the environmental, social and economic development of the region.



Small hotels and guesthouses in the Ayder Yayla, Eastern Black Sea Mountains, Turkey, 2007 (M. Somuncu)

The distress of local tourism stakeholders in the face of insecurity in the Agadez region of Niger



Lawali Dambo



Hikers through the Takolokouzet massif, east of the Aïr, 2006 (A. Morel)

Niger is a scenic and culturally diverse country with outstanding potential for tourism development. Among its highlights are archaeological sites, oases, the Ténéré and Tall deserts, the Aïr mountains, and W National Park. Tourism, however, is now threatened by increasing insecurity in the region related to two armed rebellions (1990-1995 and 2007-2009), two international crises (Libya and Mali in 2012-2013), and the presence of Boko Haram Islamists in the north of Nigeria, and Al Qaeda in the Islamic Maghreb (AQIM) since 2010 in Mali. As a result, the Agadez region, the major destination for foreign tourists in Niger, now attracts hardly any western visitors, previously the country's main tourist clientele. The tourism sector in Agadez is thus experiencing an unprecedented crisis, forcing many local stakeholders into unemployment.

Whether they be travel agents, hotel or restaurant workers, guides or craftsmen, everyone in the tourism industry is suffering from the sudden drop in visitors to the region. Faced with this desperate situation, several strategies have been adopted. Some actors, such as travel agents, are leaving the city or are proposing new tourist circuits in zones considered safe. "To survive, I am organizing tours in the direction of the Tall desert in the east of Niger and in the river region (W National Park)" explains Ahmed, a travel agent in Agadez. Among hotel owners in Agadez, those who are not closing are attempting to attract conferences and workshops. Among the guides, many have gone back to doing what they did before, or have found work in other sectors. Aghali, a former specialist guide in the Aïr Massif, has found work in a company producing fruit juice. Many others have left the country, most often in search of work in Libya, despite the current crisis there. According to some, "it is better to risk one's life in Tripoli than to sit and rot in Agadez, where



the situation appears to be at a stalemate for the moment". Those in the crafts sector are managing a little better, however, as they have been able to redirect their craft production to utilitarian objects that can be marketed within the region even without tourists present.

The effects of the crisis vary according to the degree to which an individual was dependent on tourism. The different strategies developed show the resilience of certain actors in the tourism sector, but they also are a stark reminder to those governing of the extreme fragility of a tourism model essentially oriented toward a foreign clientele. Furthermore, we can see that in the case of the Air Massif, for example, the non-sustainability of the tourism economy has nothing to do with excessive pressure on resources, or unanticipated social effects, but rather arises from a somewhat unstable geopolitical context at the scale of the entire Sahel. Under these conditions, stakeholders in the tourism sector have little influence over the sustainability of the activity which, until recently, had provided them with livelihood and social status.

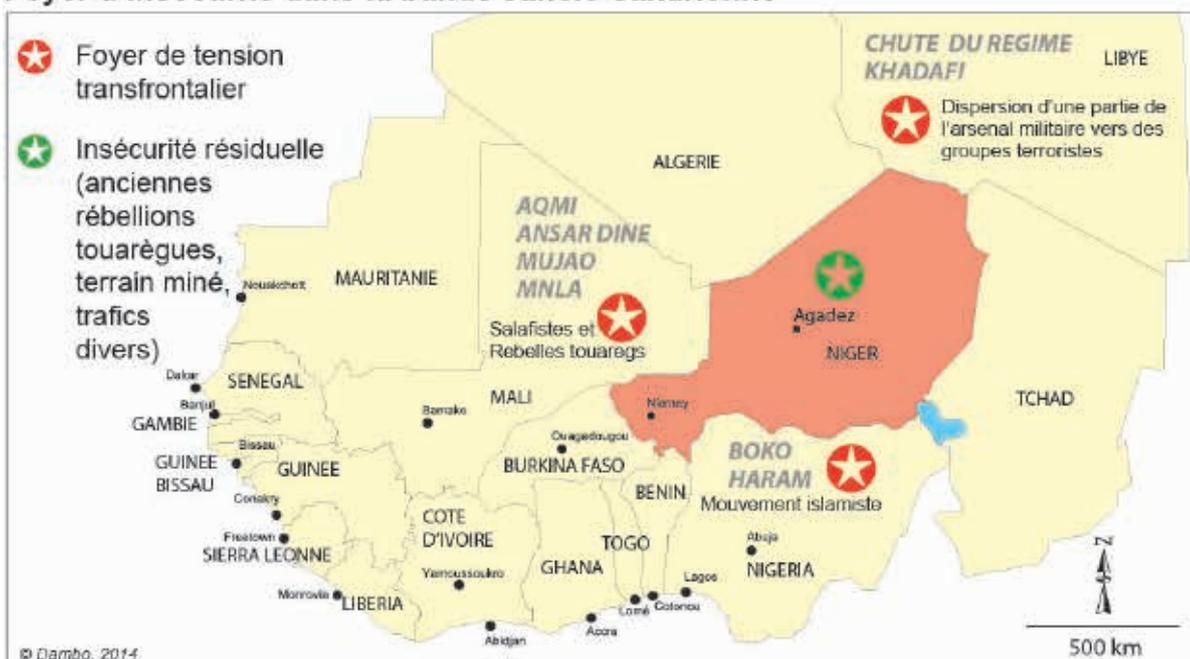


Leather and silver handicrafts displayed on a market stall in Agadez, 2011 (L. Dambo)



Before a fantasia in Timia, in the heart of the Air massif, 2006 (A. Morel)

Foyer d'insécurité dans la bande sahélo-saharienne



Mountain tourism in Switzerland: implementing Agenda 21



Eric Nanchen

The government of the mountain-rich Swiss Canton of Valais has defined the objective of its tourism policy as "to increase the added value generated by the industry in order to improve the population's well-being, while encouraging all players to assume more responsibility for the fundamental principles of sustainable development".

The key points of this policy are quality of life, innovation, respect for nature and the environment, qualitative development, customer service, professionalism and excellence. This agenda was set in motion in 1998, when the Valais parliament adopted a Sustainable Development Charter. That document gave rise to "Valais Excellence" and the "Foundation for the Sustainable Development of Mountain Regions", two structures which have become the pillars for the canton's sustainable development policy and its approach to tourism.

As with many other Alpine regions, the tourism industry in Valais underwent rapid growth in the 1960s and 1970s, contributing to a flourishing economy, especially through the construction of second homes. The side effects of this boom, however, were pressure on natural resources, landscape degradation, and prices that became too high for the local population. Short-term benefits were countered by long-term negative effects that pointed to the need for a more holistic approach to tourism development and a more proactive role for the government.

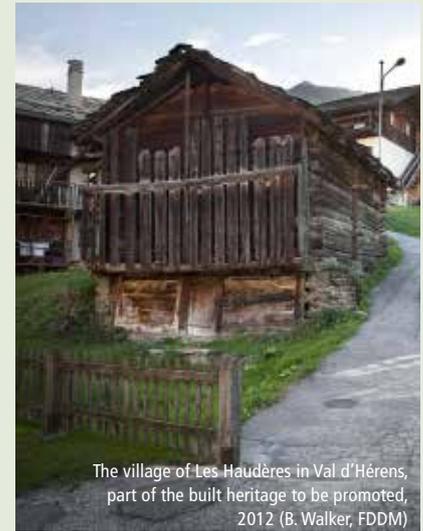
Created with the support of the State Secretariat for Economic Affairs and the canton, Valais Excellence is a corporate management tool and business network based on the principles of social, economic and environmental sustainability. It is equally appropriate for small and large companies, as well as for public authorities. Tourism service providers are the first to have benefited from the design of specific tools for the industry based on standards of the International Organization for Standardization (ISO), helping companies obtain ISO 9001 (for quality management) and ISO 14001 (for environmental sustainability) certifications. The greatest achievement

The Matterhorn, an iconic landscape that must be protected, 2012 (B. Walker, FDDM)



of this public policy tool has been to point to the early need to incorporate all stakeholders to ensure progress toward a sustainable tourism economy. At the end of 2013, 137 companies and public entities were, or were in the process of being, certified, and 29 of them had a direct connection with tourism.

The Foundation for the Sustainable Development of Mountain Regions is responsible for coordinating Agenda 21 for the canton. It has defined 16 lines of action, the second of which is dedicated to sustainable tourism. Other concrete actions, beyond Valais Excellence, include encouraging the construction and marketing of tourist accommodation with high occupancy rates, notably through town planning measures, as well as supporting flagship events that meet sustainable development criteria. The canton has also established a tourism research institute and actively participates in the Network of European Regions for a Sustainable and Competitive Tourism.



The village of Les Haudères in Val d'Hérens, part of the built heritage to be promoted, 2012 (B. Walker, FDDM)

“Tourism is a genuine social issue and a source of economic development; therefore it must be properly regulated in order to increase its added value while improving the population’s well-being. In other words, we need to promote tourism that respects, protects and manages the resources upon which it depends”

(one of the 16 commitments of the canton of Valais for sustainable development, commitment No. 2).



The Aletsch glacier, the largest glacier in the Alps, classified as a UNESCO world heritage site, 2012 (B. Walker, FDDM)

Tourism and environmental institutions in Costa Rica

Linda Boukris

Costa Rica, with its well-developed democratic and environmental institutions, has been considered an exception within the Central American isthmus. Tourism became one of the main pillars of the economy in the 1990s, and its success has contributed to the wide recognition, among the local population, of natural resources as the country's most valuable national assets. The Costa Rican state, which has promoted strong environmental norms and institutions over a period of several decades, has played a critical role in implementing sustainable tourism development and encouraging environmental practices among the population.

Costa Rica has shaped an impressive tourist industry by projecting the image of a peaceful country with an exceptional and abundant natural environment. Indeed, the images of Costa Rica as a political haven and an ecological paradise have helped transform this small country of 51,100 km² and 4.6 million inhabitants into a tourist regional power with two million tourists each year.

Since the 19th century, Costa Rica's history has been shaped by the adoption of progressive social policies (education, health care, labor rights) and democratic institutions (abolition of its military forces, proclamation of neutrality, Nobel Peace Prize of President Oscar Arias in 1987). Costa Rica's status as a "green country" protecting its biodiversity (4.5% of global biodiversity), however, is a relatively recent development. Indeed, in the 1980s, Costa Rica had one of the highest rates of deforestation in Latin America, mainly related to its historically extensive farm-based economy. Since the 1990s, Costa Rica has adopted an increasingly extensive environmental legislative agenda including constitutional reform and various laws protecting the country's biodiversity. The political and economic viability of such a shift, and the changes in Costa Rican society that have accompanied it, can in part be attributed to the success it has brought to tourism.

Arenal Volcano, 2011 (L. Boukris)



Major environmental legislation

1955	Creation of the Costa Rican Institute of Tourism (the volcanoes became national parks, under the responsibility of the ICT)
1969	Forestry Law
1977	Creation of the National Park Service
1977	Maritime Zone Law (protection of the waterfront, including mangroves)
1986	Creation of the Ministry of the Environment
1992	Wildlife Conservation Law
1994	Article 50 of the Constitution establishes "the right to a healthy and ecologically balanced environment"
1995	Environmental Organic Law
1996	Forestry Law
1998	Biodiversity Law

Costa Rica belongs to the Pacific Ring of Fire, with more than 100 volcanoes within the three volcanic chains which traverse the country (*Cordillera de Talamanca*, *Cordillera Volcanica Central* and the *Cordillera Volcanica de Guanacaste*). Eight national parks are centered around volcanoes, five of which are intensely active: Turrialba, Irazu, Poas, Arenal and Rincon de la Vieja. Poas Volcano National Park and Irazu Volcano National Park, located near the capital, San José, are among the most visited national parks in Costa Rica.



Ara, Isla Tortuga, 2014 (A. B. Rodrigues)



Red Alpinia flower in the Tree of Life (wildlife refuge and botanical garden), Cahuita, 2014 (A. B. Rodrigues)

The increasing value attributed to nature and conservation has been constructed largely around three natural assets - forests, volcanic mountains, and beaches - now seen as part of the national heritage and symbols of Costa Rica. This contemporary national image has shaped environmental discourses, institutions and everyday practices among the Costa Rican population, especially in relation to biodiversity conservation and sustainable tourism development.

Public protected areas. Source: National System of Conservation Areas

(Sistema Nacional de Áreas de Conservación, SINAC)

Number of protected areas	Protected terrestrial surface area (ha)	% of the national terrestrial surface area	Protected marine surface area (ha)	% of the national marine surface area	Total of protected surface area (ha)
166	1,327,000	25%	521,000	17%	1,848,000

The case of La Fortuna de San Carlos, a small town of around 7,000 inhabitants located in the north of Costa Rica, and famous for the neighboring Arenal Volcano National Park, illustrates the increasing orientation of the Costa Rican population towards environmental issues and a strategy of tourism development based on sustainability.

La Fortuna was historically dedicated to agriculture before becoming an international destination after the eruption of the Arenal volcano in 1968, first attracting scientists, then international and national tourists. The volcano had been dormant for many decades, and prior to this major eruption the inhabitants of La Fortuna were relatively unconcerned about the danger it presented. Following the eruption, however, and the attention brought by the volcano, the town started to be symbolically attached to the mountain. Arenal Volcano not only became an icon of local and national identity, it also began to attract tourists, as many as 800,000 per year. Tourism development, fuelled by local investment (80%), was accompanied by the increasing participation of La Fortuna residents in organizations devoted to protecting the environment. As La Fortuna became a prosperous tourist destination, the inhabitants assumed an active role in preserving natural resources and the landscape, seen as the core of the local and national economy.

Costa Rica's powerful environmental image, translated by public authorities into effective laws, norms and institutions, has been cultivated over several decades. It has played a key role in advancing sustainable tourism and securing the public's commitment to maintaining a verdant landscape that is planned, managed and protected.

Top-down tourist development in Sa Pa, Viet Nam



Jean Michaud

Hmong Leng women planting rice in the fields, Lao Chai village, Sa Pa, 2009 (J. Michaud)

The mountain town of Sa Pa, in the northern highlands of Viet Nam, arose as a French colonial hill station, was largely destroyed during war, and is now enjoying a new lease of life as a tourist destination. In the process, it has been reinvented to meet the desires of the new inhabitants: the Vietnamese urban middle-class but also a fair number of foreigners. Whereas originally it was the elite French, it is now the newly affluent post-*Đôì Mới* (market liberalization) Vietnamese who are arriving in Sa Pa in droves, the avant-garde of the nation's relentless march toward modernity. The appeal of Sa Pa includes a scenic landscape, a refreshing climate, and cultural exoticism: the region is home to an array of "colourful" minority groups, including the Hmong (Mông), Yao (Dao), Nùng, Thái, Giáy, and Sa Phó. Together, they represent 85% of the district's population, yet, as in other highland areas populated by ethnic minorities in Viet Nam, they control little.

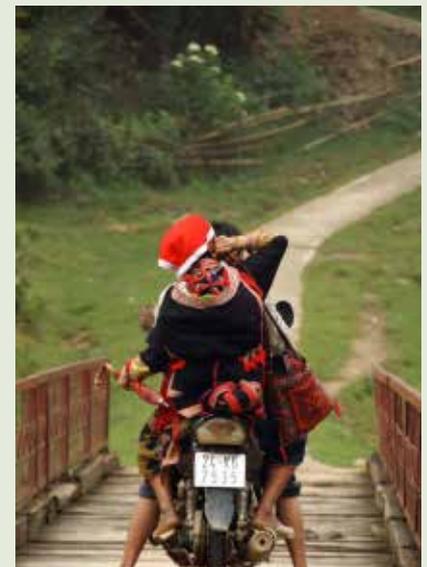
A small number of studies have looked at former Vietnamese colonial hill - stations that have since become modern tourist destinations. These studies include the work of Jennings (2011) on Dalat in central Vietnam, and that of Michaud and Turner (2006) and Truong et al. (2014) on Sa Pa.

In 1993, Viet Nam began to allow tourists to visit the highland areas, following the opening up of its socialist economy to liberal market forces. Sa Pa embodies this change in consummate fashion. Previously, the forgotten rural community had been ruled by cooperatives and local Communist Party cadres. Now, national and international tourism has exploded and private businesses flourish. The mix of socialist and capitalist ideals, however, yields many paradoxes: local party governance is still strongly enforced, while a horde of new Kinh (Viet) entrepreneurs has moved



in to capitalize on every economic opportunity booming tourism can offer. An increasing number of contradictions can be observed and opposing visions of local development have resulted in struggles that have left scars on the town and its surroundings. Today there are more hotels than the local infrastructure can support, failed grand schemes left to decay, noisy karaoke bars, and concrete walkways marring picturesque rice fields. Major international players are also entering the scene, bringing their distinct visions for the development of Sa Pa, including luxury, multi-star resorts perched on hilltops.

Image prevails over reality, and fantasies prove to be a more powerful draw than authenticity: counterfeit traditions, supposedly sexually loose tribal women, and "Love Markets". The consumers' desire for exoticism encounters enterprising hosts seeking to satisfy it and their own desire for profit. Here, as in a number of cases studied elsewhere in the developing world, the major winners are mostly industrial, private, or state-sponsored entrepreneurs exploiting the local and migrant labor they command. In contrast, the local ethnic minorities of Sa Pa district, despite forming the vast majority of the town's population, have been left to watch and hope that a few benefits trickle down to them. As peasants lacking formal education, or social and economic capital, with their only asset being their cultural distinctiveness, they are systematically deprived of access to real power in the state apparatus. The odds that, in the long term, local ethnic minorities could benefit from any sustainable form of tourism development — meeting their aspirations, and respecting their distinct identities — appear low.



A Red Dao lady returning home on a motorbike in Tá Phú village, Sa Pa (M. Gibert)



A Black Hmong lady selling craftwork in Sa Pa, 2008 (M. Gibert, Paris 1 University)

The political dimension of tourism development in the Caucasus

Alexey Gunya

The Caucasus Mountains, an important tourist destination at the intersection of Europe and Asia, is socially and politically fragmented due to conflicts and differences in national development and governance. In the Russian part of the Caucasus, tourism development has been led by state investment. In the southern Caucasian states, however, tourism development has been fuelled by multiple stakeholders, including business, NGOs and local communities.

The Soviet period: one state, one strategy for tourism in the Caucasus

During the Soviet era, the centralized state with its planned economy was the only actor developing tourism in the Caucasus. The Caucasian region, as a contiguous entity, extended as far as the borders with Turkey and Iran, and hiking trails from the North Caucasus along the main range to the South Caucasus, especially to the Black Sea, were very popular. Under the state monopoly, with no private tourism sector, there was a stark contrast between stays at vacation and health resorts, sponsored by government departments or trade unions and typically lasting three weeks, and other activities that took place largely without tourism infrastructure, such as summer backpacking and camping.

Fragmentation of the Caucasus and the changing terrain of tourism

In the 1990s, the resorts of the Caucasus went through a recession. Two main factors accounted for this: on the one hand, political instability in the Caucasus was growing and, on the other, people from the former Soviet Union increasingly began to travel abroad. The fragmentation of the Caucasus region due to conflicts and the establishment of new sovereign states with new borders brought an end to the transboundary tourism that had characterized the region earlier. The Eastern Caucasus regions — first Chechnya, then Dagestan and Nagorno-Karabakh — have almost disappeared from the tourist map. The former border regions of the Soviet Union with Turkey and Iran in the Lesser Caucasus, however, which had been closed to tourism, have since become more accessible and are growing as tourist destinations.

Armenian church on the border with Turkey, Ararat Valley, 2007 (A. Gunya)





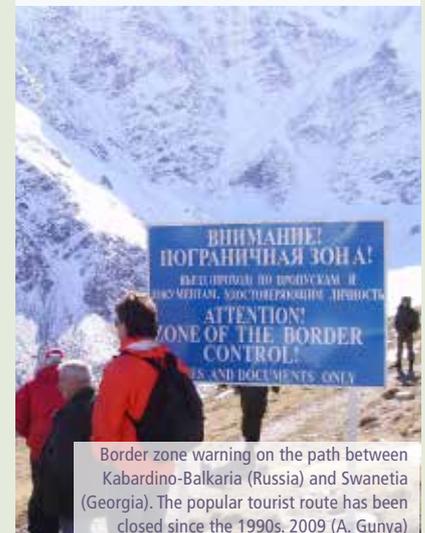
Mount Elbrus, the highest peak of the Caucasian Mountains (5642 m), 2012 (A. Gunya)

Impact of the recent modes of governance on tourism development

In the North Caucasus, belonging to Russia, the state continues to be the dominant force in tourism development, with small businesses and foreign investment playing but a minor role. Government investments for large tourist centers have been significant. Thus the official cost of the tourism infrastructure developed for the 2014 Olympic Games in Sochi was about 7 billion US dollars. In the southern Caucasian countries, in contrast, small businesses and NGOs supported by international foundations and grants, together with the state, are the driving forces in tourism development. Here, there have been many advances in improving the institutional environment for tourism development at the local level, including community-based tourism.

Despite spectacular natural and cultural landscapes, and high cultural, linguistic and biological diversity, tourism in the Caucasus in many places is currently not sustainable, principally because of conflicts, but also due to institutional and market deficiencies. Nonetheless, as local people themselves become more mobile, local initiatives and the tourist market may become more significant. Community-based tourism offers possibilities for innovative approaches with positive effects on social and economic development, perhaps helping to overcome some of the distrust of tourism that still characterizes many rural localities and villages. However, there are strong traditions of hospitality that characterize the region, and in some parts of the Caucasus, local tourism initiatives have drawn attention to the need for greater regional planning and better environmental protection, particularly of ecologically sensitive areas, thereby sending a clear call for a more proactive role by central government.

Tourism in the Caucasus holds the potential for extending economic development in the region as well as contributing to a reduction in social tensions and conflict. The prospect of renewed transboundary cooperation in relation to tourism is particularly significant, as this could improve the image of the Caucasus region as a whole. As a beginning, however, the positive experiences in some Caucasian states and regions with community-based tourism could be extended to new areas, thereby contributing to the reemergence of the Caucasus as a rich and compelling tourism destination.



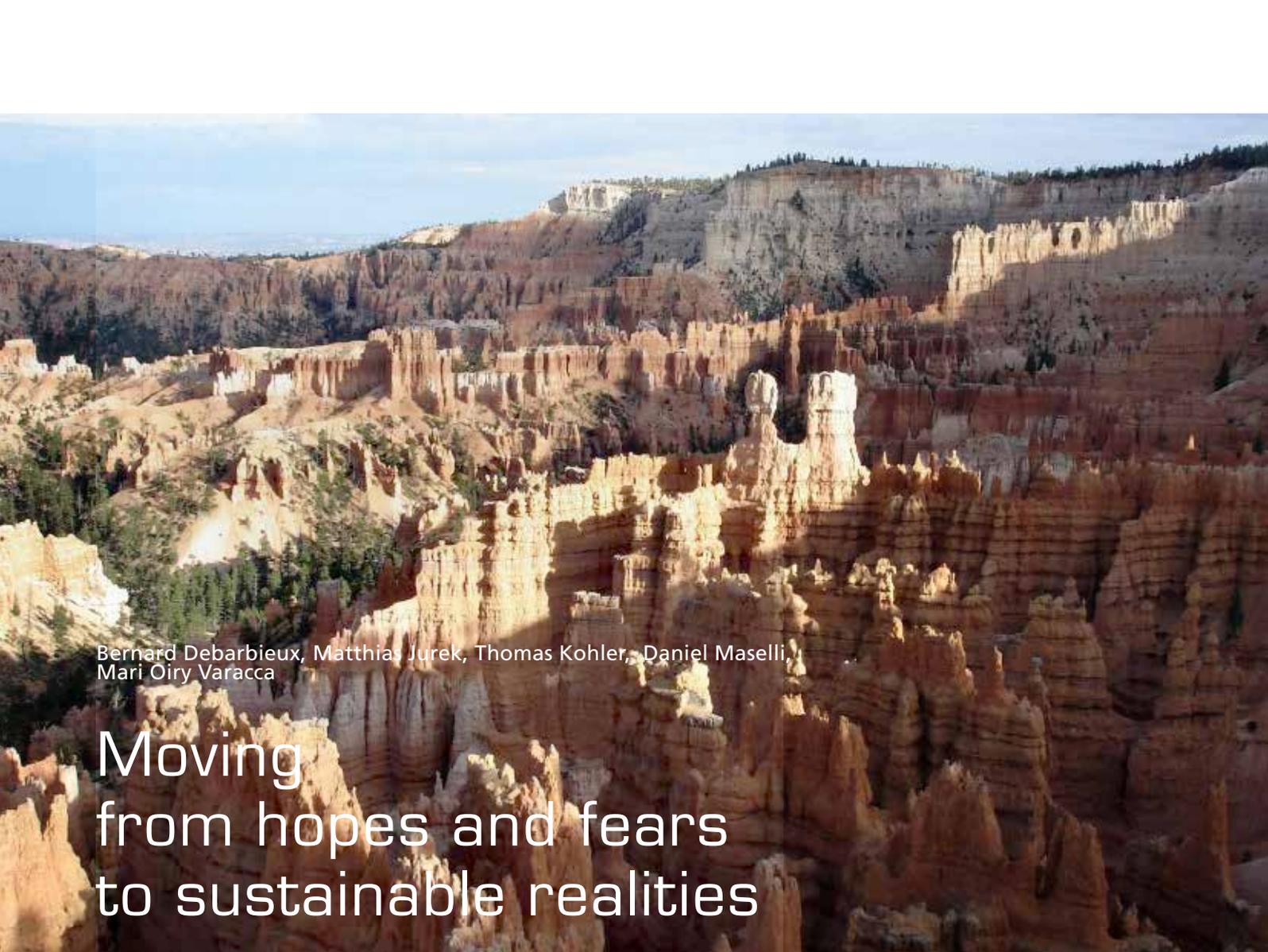
Border zone warning on the path between Kabardino-Balkaria (Russia) and Swanetia (Georgia). The popular tourist route has been closed since the 1990s. 2009 (A. Gunya)



Moving from hopes and fears to sustainable realities

6





Bernard Debarbieux, Matthias Jurek, Thomas Kohler, Daniel Maselli,
Mari Oiry Varacca

Moving from hopes and fears to sustainable realities

Bryce Canyon National Park, Utah, USA, 2008
(J.-L. Beuze)

Tourism is one of the fastest growing industries in the world, and in mountain regions it can give rise to high expectations for development. It has the capacity to create jobs and extend services and products that support both tourists and local people alike in marginal areas. Tourism thus has the potential to reduce poverty and provide alternatives to existing economic activities and traditional livelihoods that may be precarious or otherwise threatened by global competition.

However, as can be seen in the various case studies presented here, the development of mountain tourism brings many challenges in terms of social equity, cultural transformation, the protection of natural resources and ecosystems, and governance, both in industrialized and developing countries. The studies brought together in this brochure point to a range of conclusions:

SOCIAL AND SOCIO-ECONOMIC ISSUES

- The economic benefits of tourism development often go to external providers and tourism operators, while local communities obtain only nominal gains. Sustainable mountain tourism demands a more balanced distribution of costs and benefits.
- Adopting a community-based approach, while prioritizing social cohesion and equity, is one possible route for achieving such a balance. Tourism is always a major source of internal social change; traditional societies and cultures are in fact always transformed when they expose themselves to the kind of sustained intercultural contact that tourism entails. Therefore, the main social issue for local communities is not to preserve their societies as they are, but to anticipate social transformation initiated by tourism development.
- The sustainability of tourism is stronger when local communities can use it to strengthen their social ties and cultural identities. Such social cohesion is favoured when the various stakeholders are mutually dependent and seek common initiatives with broad benefits, bringing gains to diverse sectors of the local economy.
- Similarly, tourism is more sustainable when local societies can, at the same time as attracting visitors, valorise and protect resources and practices which are meaningful to them. The valorisation of traditional practices and landscapes (even those that are industrial, such as at L'Argentière La Bessée in France), can be a source of both pride and income. This is especially meaningful for communities that have been marginalized or denigrated in their respective national contexts (as can be seen with some ethnic groups and rural populations in Morocco and Niger, as well as in certain areas of the Pyrenees and Carpathians). This valorisation, however, needs to be conscientious and organized so as to avoid the excessive commodification and folklorization of cultural assets.



Merapi Volcano, Indonesia, 2006 (JB Bing, Geneva University)

ENVIRONMENTAL ISSUES

- The unique biological diversity and dramatic landscapes of mountains provide important foundations for the development of sustainable tourism. Mountains furthermore have been valued in many traditional contexts, holding significant practical and symbolic roles for local cultures (Mount Kailash provides a particularly salient example). Development strategies should aim to strengthen the awareness of local



people and tourists alike of the value of a healthy environment, the need for conservation, and the importance of monitoring and directing local change.

- Nature-based tourism can have long-lasting benefits only if the environmental costs are controlled. There is a need to manage visitor flows in order to avoid excessive environmental pressure and degradation (as seen, for example, in Western Iran). When establishing or improving infrastructure, precautions must be taken to limit environmental impacts. Since environmental assets are often closely linked to cultural assets, the management of the environment must consider both biophysical and cultural elements.

POLITICAL ISSUES

- The development of sustainable tourism requires professional and sectorial organizations capable of linking local initiatives with external partners. It must nonetheless prioritize local associations, which are better able to reconcile economic objectives with social and cultural ones, and rely on local political authorities, which are the natural partners of national administrations.
- The development of sustainable tourism can benefit from national or sub-national policy frameworks, provided these are respectful of cultural and natural resources (as in Costa Rica) and the interests of local communities (as in Morocco). Likewise, it can suffer from the lack of such frameworks, or when existing national policies - typically top-down - do not take into account the local context (as seen in North Vietnam, and often in the former Soviet republics). Local sustainable development initiatives and associated policies need to be continually re-evaluated, and adjusted accordingly, as shown by the example of Valais in Switzerland.
- Peace building is an essential issue for communities in which tourism development is regularly jeopardized by rebellions, international conflicts and terrorism, such as in the Air Mountains of Niger.
- The development of sustainable tourism relies on the building of networks, which can provide resources, models and experiences. The support of regional NGOs (as in the case of the Eastern Pamir in Tajikistan), UN organisations (as in the case of Northern Laos), bilateral agencies working together with national authorities (as in the case of Montenegro), or external private-sector investors (as in the case of Aspen) can be decisive in community-based initiatives.

- Because mountain chains often form borders, efforts to promote sustainable tourism and the sustainable management of cultural and natural resources in mountain regions frequently demand inter-regional and international cooperation and coordination. The development of cross-border tourism correspondingly offers an opportunity to strengthen cooperation in other relevant fields such as environmental protection, regional planning, and public infrastructure.

FINAL CONSIDERATIONS

- There is no “one size fits all” solution that will lead to “perfect” policies and institutions promoting sustainable tourism for all mountain regions. Generally, however, the building of a shared vision for the objectives and modalities of tourism development, involving local stakeholders, governmental entities, and private and associative partners alike, is critical to the success of any such endeavour.
- Capacity building and skills development are crucial if tourism, especially community-based tourism, is to succeed over the long term. These capacities and skills should be able to address socio-cultural concerns, economic change, and environmental management. But they should also be attentive to social capital and mastering the relational resources offered by the interconnected modern world. Moreover, development ideally can be combined with empowerment and emancipation, especially for women, as seen in the example of women’s cooperatives in Morocco.

The initiatives to develop sustainable tourism presented in these case studies correspond to relatively recent endeavours, many with short track records. It remains to be seen how they develop over time, and if their overall positive elements can be confirmed in the years ahead. Monitoring and comparative analysis will be crucial for future development-oriented research, which should aim to further identify relevant practices and lessons learned, while refining policy advice for genuinely sustainable tourism development.



Taking yaks to the high pastures, Batchor, Tajikistan, 2008 (S. Henriod: www.henriod.info)



An aerial photograph of a snowy mountain slope. The slope is covered in numerous parallel ski tracks, creating a rhythmic pattern of light and dark lines. Several skiers are visible, scattered across the slope, some standing and some in motion. At the top of the slope, there is a small structure, possibly a lift station or a guardrail. The overall scene is bright and clear, with a high-contrast sky.

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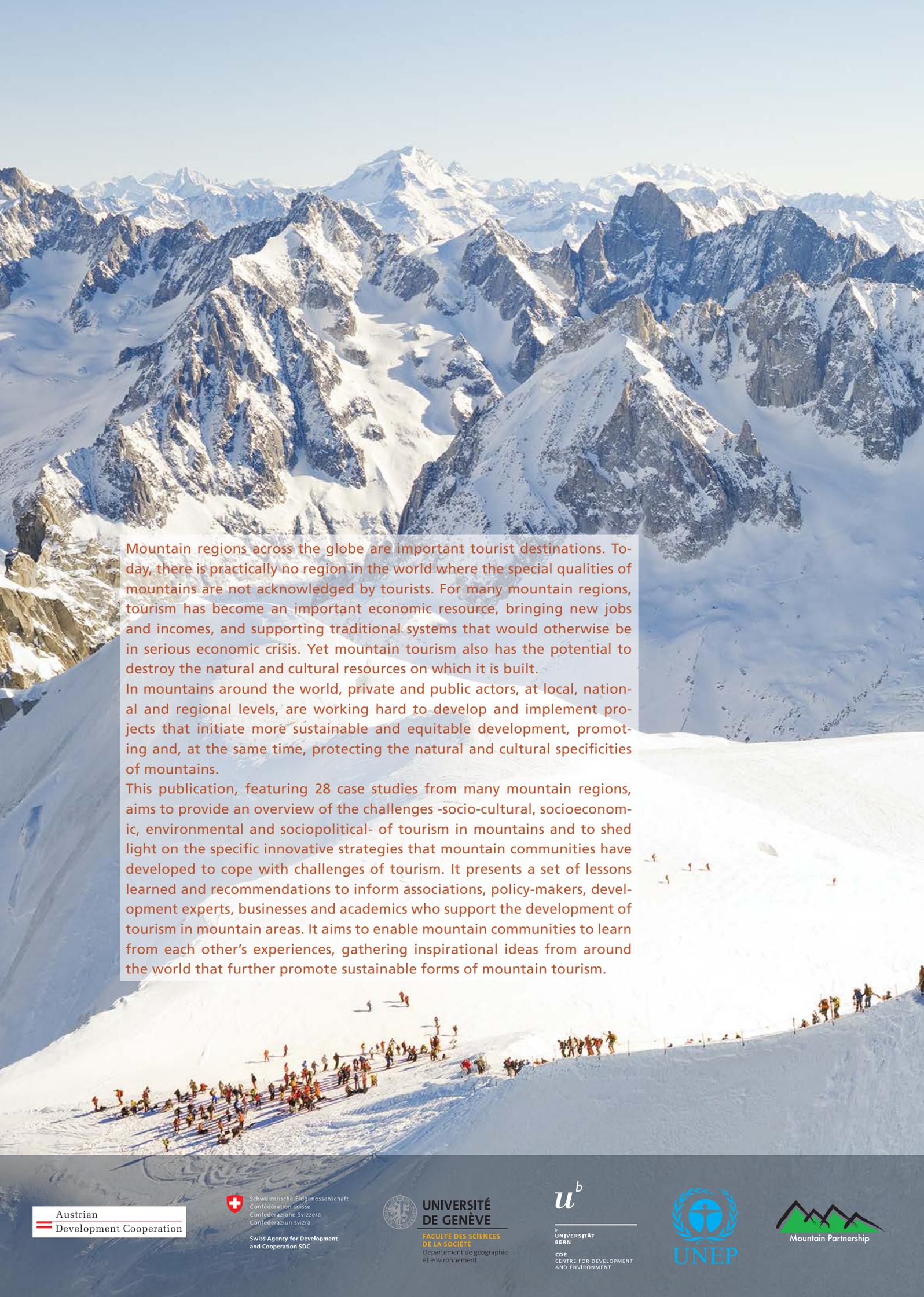
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Mountain regions across the globe are important tourist destinations. Today, there is practically no region in the world where the special qualities of mountains are not acknowledged by tourists. For many mountain regions, tourism has become an important economic resource, bringing new jobs and incomes, and supporting traditional systems that would otherwise be in serious economic crisis. Yet mountain tourism also has the potential to destroy the natural and cultural resources on which it is built.

In mountains around the world, private and public actors, at local, national and regional levels, are working hard to develop and implement projects that initiate more sustainable and equitable development, promoting and, at the same time, protecting the natural and cultural specificities of mountains.

This publication, featuring 28 case studies from many mountain regions, aims to provide an overview of the challenges -socio-cultural, socioeconomic, environmental and sociopolitical- of tourism in mountains and to shed light on the specific innovative strategies that mountain communities have developed to cope with challenges of tourism. It presents a set of lessons learned and recommendations to inform associations, policy-makers, development experts, businesses and academics who support the development of tourism in mountain areas. It aims to enable mountain communities to learn from each other's experiences, gathering inspirational ideas from around the world that further promote sustainable forms of mountain tourism.