



Enhancing the Elaboration of an Inspiring Mountain Narrative

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Abstract. Over the last decades, mountains have been recognized as “sentinels of change” for climate warming trends and global change. The rising attention for local and regional action in mountain areas has therefore not only been oriented at long-standing challenges due to their specific topographical location, but increasingly fostered considerations of resilience and global sustainable development pathways. However, perspectives for mountain regions are overwhelmingly set in bleak pictures of remote and less-favoured areas that fail to catch up with more favourable lowland and central areas. This mainstream narrative is hardly beneficial to nurture emerging concepts of innovative futures and renewed visions for an increased valuation of nature-based assets of mountain regions. This paper intends to synthesize the increasing stock of inter- and trans-disciplinary studies on the complexity of “mountain” development. They argue that research issues need to be focused on a wide range of local to global levels, and underline the need for trans-disciplinary perspectives to understand the challenges for sustainable development. This also implies convincing arguments for a reinforced focus on storylines of mountain agency that regard place-specific assets and enable development strategies that harness the respective potential. This conceptual shift implies policy approaches that highlight the specificity of social-ecological systems of mountain areas and incite actors at the various administrative levels to enlarge their perspectives and raise confidence to shape place-sensitive opportunities of mountain areas.

Keywords: mountain research, rural development, territorial balance, spatial assets, local action

Received: 04.05.2026 **Accepted:** 17.05.2026 **Published:** 23.06.2026

<https://doi.org/10.54414/YTKY2728>

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1. Introduction

Mountains have attained a particular image in European citizens' spatial contemplation, representing wide spaces of supposedly pristine nature, rugged topography, harsh climate, and vast regions for experiencing detachment from industrial and crowded centers. Since they account for about 36 percent of Europe's area (Drexler et al. 2016, 9) and about 24 percent of the Earth's land surface (Price 2015, 3), they have attained increasing interest in the discussion on sustainable development, stepping up over the last decades. Its high relevance is underpinned by the fact that 12 percent of the world's population live in the mountains, and a further 14 percent very close to them (Price 2015, 3). Threats to the ecological quality have been increasingly recognized, particularly with the rise of climate change concerns, and analyses in many mountain contexts led to visions that capture mountains as decisive places for resilience and global sustainable development pathways. They have been addressed as “sentinels of change” (Belmont Forum 2015) and early indicators of “global change” (Price 1999), deserving particular attention due to the wide-ranging and long-term impact of (non) action in these areas for large spaces beyond mountain boundaries.



The strengthened understanding of the need for integration of environmental considerations, particularly articulated since the 1970s, eventually fostered the inclusion of “mountain” themes in global development processes. Thus, specific challenges of mountain areas were addressed in the final Agenda 21 document of the Earth Summit at Rio de Janeiro in 1992 (UN Conference on Environment and Development) as a global challenge (United Nations 1992, Chapter 13: Managing Fragile Ecosystems: Sustainable Mountain Development). “Ever since then, the research remit and activities in many countries of the world increased and focused on a more comprehensive approach” (Dax 2017). The discourse underpinned the perception of mountains as a global heritage value (Chakraborty 2020) that demands particular concern for its future development.

The global relevance of the issue is visible through the declaration of the International Years by the United Nations General Assembly for 2002 (International Year of Mountains) and for 2022 (International Year of Sustainable Mountain Development), which constitute an opportunity and impetus to promote understanding, visibility and targeted action for mountains. The policy debate reflects the increasing awareness of mountain research priorities, highlighting tremendous (global) ecological threats, place-sensitivity and interrelations of mountain ranges with lowland regions throughout all parts of the world. An increasing stock of comprehensive, inter-disciplinary studies has identified the complexity of these “mountain” issues at local to global levels, and underpinned the need for trans-disciplinary perspectives to understand the challenges for sustainable development.

This paper aims to go beyond the research need on the issue and argues about the crucial necessity to change present mainstream arguments on mountain “backwardness”, “disadvantage”, challenges of “remoteness” and “peripherality” and policy “traps” from which no escape is thought to be conceivable. Storylines about mountain development therefore need to be reshaped and emerging “narratives” should take account also of opportunities, local assets, positive effects of mountain action and ecosystem services delivered not just for local communities, but available and essential for societies outside mountain regions as well.

The paper hence will start with an appraisal of the core arguments about misleading representations in current dialogues and underline the need for a renewed, meaningful narrative that might enhance sustainable spatial development. In the following chapter, policy concepts, implementation, and their restricted impact in reducing socio-economic disparities between mountains and lowlands will be presented. In particular, the evolution of policies will be shown as rich in varying concepts, but with weak effects in terms of enhancing mountain development and territorial convergence. The analysis of the mainstream narratives employed so far will point to a set of challenges but also emerging awareness of assets. From this juxtaposition, key criteria for encouraging narratives will be deduced and presented in the following chapter to support discussions on how to overcome policy traps with regard to mountain development policies. Finally, the conclusion will underpin the wide array of recent studies to increase transformation considerations, focus on communication priorities and science-policy exchange to make knowledge sensible for both practitioners and politicians as well as for local and external people.

2. Why we need inspiring narratives for mountain areas

The intensified commitment to analyzing specificities of mountain areas over the last decades underpins the awareness of the array of pressures weighing on mountain regions and attenuating socio-economic activities and future options for locals (Klein et al. 2019). The threats to mountain social-ecological systems discerned by these analyses point to the long-term and often cumulative effect of spiraling-down forces, visible in several dimensions: Pressures are denoted particularly through the mountain characteristics of (i) marginalization, (ii) isolation, (iii), a multitude of hazards, (iv) the spatial divergence of provision and use of ecosystem services (“cross-scale ecosystem services”) and (v) the higher complexity of subsistence-oriented mountain socio-ecological systems.



The complex interactions of mountain ecological, social, cultural and economic drivers are increasingly understood as fundamental building blocks of mountain socio-ecological systems and obstacles to policy and economic changes (Alessa et al. 2018). To sustain the provision of beneficial ecosystem services by mountain areas, the characteristics of complex and “wicked” problems inherent to many coupled natural and human systems of mountain regions have to be seen and taken into account in searching for policy responses (Ariza et al. 2013). Interlinkages in both directions, e.g. water provision for lowlands (Immerzeel et al. 2020) or appreciation of mountains as places of amenities (Moss 2006), untapped potential for renewable energy use (Faraj et al. 2025) and attractive landscapes (Dax and Tammé 2023) are increasingly recognized examples of cross-scale implications.

However, local actors in mountain areas are often peripheralized, and economic and political decisions, in general, are taken by outsiders. Many products and services rendered by mountain people are not appreciated in their full quality and hence not adequately remunerated, or revenues don’t accrue for local providers. Despite the potential realized for mountains, they are still primarily conceived as marginal places, facing regional disparity and challenges which often lead to significant regional development traps (Sarkki et al. 2025). Such conceptual arguments become visible in the continued framing of the predicament of mountains by the following adverse terms: From “global change” challenges (Price 1999), a set of compounded terrific “pressures” inducing a series of “paradoxes” (Klein et al. 2019), through alarming “risks”, “natural disasters” and “hazards” due to climate change processes (Schneiderbauer et al. 2024) to the pervasive governance challenge visible through “weak local governance” in many mountain areas (Tucker et al. 2021), all these concepts underpin a bleak vision of mountain development options. Conversely, designing mountain action that supports sustainable development pathways requires more priority to references addressing the place-specific assets and characteristics that would enhance beneficial future action.

Assessment of policy and rural development strategies reveals that action for enhancement of mountain regions comes to a deadlock if they don’t depart from the still predominating conception of highly polarized spaces. Problems in the peripheralization discourse either dissimulate the challenges by pointing to the diversity of contexts and the “fuzziness” of problem definitions or forestall efforts for shaping sustainable strategies by “bad talking” through framing peripheries “as under-performing economically, specialized in commodity extraction, located far away from the main decision centres, decoupled from the main contemporary processes of development, and subordinate to the core” (Pugh and Dubois 2021, 270).

To overcome these negative perspectives, communication on the role of mountains in spatial development, their interrelation with other spaces, and an awareness of a balanced view of opportunities and threats of these areas seems inevitable. The need to rectify the misleading present mainstream representations of mountain options and tasks is increasingly realized and addressed by recent analyses (Schneiderbauer et al. 2024, Grecchi et al. 2025, Grüner and Gruber 2025). Nevertheless, we should acknowledge that a series of ambitious policy concepts are tackling this predicament and advocate for place-based concepts that foster local perspectives and agency. Initiatives are linked primarily to objectives of territorial cohesion (Dax 2008), smart mountain development (Euromontana 2022) and, most recently, the Andorra Declaration, entitled “Elevating Mountain Action Beyond 2030” (Euromontana 2026). At the global level, the important role of mountains in climate change vulnerability is addressed in a specific chapter of the report of the Intergovernmental Panel on Climate Change (Adler et al. 2022). The concern for place-based and impactful local action is also visible increasingly in widely discussed documents on rural development, in particular the future policy vision of the EC, i.e. the Long-Term Vision for Rural Areas (LTVRA; EC 2021) and ensuing Rural Pact declaration (EC 2024) as well as OECD’s plea “to rethink rural not as the periphery of progress, but as a core partner in a more resilient and equitable global future” (OECD 2025). Even if these declarations of intent of high-level policy documents testify to the integration of place-based concern and balanced territorial visions, there remains an important implementation gap in



the current practice of regional development. This is apprehended as a persistent science-policy gap in addressing promising mountain narratives

Applying place-specific narratives hence would suggest a more balanced account of mountain options, including a promising framework for mountain strategies and action, advocated by scholars from different mountain contexts (Ornston 2021, Dax 2022, Bandyopadhyay 2023). Such a perspective would strengthen mountains as places of community building and attractiveness, and agency options suitable for all societal groups, including newcomers to mountain areas. In this vein, mountain places would be framed differently from former images, and representation should include the following aspects (Dax et al. 2022, 41):

- Priority should be placed on framing mountains as places that conceive attractive living modes, implying a balanced assessment of challenges and opportunities linked to location and context. This would involve acknowledging desires, aspirations, capacities and troubles of all groups of local population, including newcomers and in-migrants, to enable appropriate strategies for participation in community life and personal well-being.
- A particular focus for these places is on empowerment and participation of all inhabitants (Rappaport 1995), taking account of and modifying existing power relations if required for achieving social justice. Transformation should not remain a buzzword encapsulating a rhetorical summary of transition need, but address the multitude of contextual conditions and drivers as well as basic assumptions underlying the implicit understanding of the relevant policy processes (Dax and Copus 2020).
- Mountain places would not be seen as stand-alone locations but rather considered in their interdependence with lowlands and central locations. Mountain-lowland exchange would be an inherent value of appreciating specific functions.

This renewed perception points essentially to the “power” of narratives, and within mountain development, its ability to foster sustainable development pathways (Guske et al. 2019). As Bruner outlines, narratives are not just storylines but might “operate (...) as an instrument of mind in the construction of reality” (Bruner 1991, 6). Describing a number of diverse features of narratives, he particularly underpins the application of “intentional state (ments)”, their function as a “basis of interpretation” of observed agency, their “generic” truth and “normative” value. The hermeneutic nature of narrative shaping implies a tight dependence on context and common “knowledge background” to approve new explanatory stories as valuable paradigms. To accept such a shift in paradigms and achieve appropriate narratives of change (Wittmayer et al. 2019), it needs to respond to the core challenges and convey meaning to local and regional actors why previous theories (of change) should be altered.

For mountain regions, such narratives have to use a positive language, carefully reconsidering the emerging options and presenting visions for a “good life” in mountain places. The focus is explaining change through a convincing narrative that has been elaborated by assessing, in a comprehensive discourse, opportunities and challenges, knowledge and institutional background, and the role and activities of actors in a given place. Such a process implies a strong commitment to “social innovation and an understanding of transformation oriented to empowerment, participation and community development which enhances local strengths and is open to new ideas and exchanges with other places” (Dax et al. 2022, 41).

3. The evolution of mountain policy discourse and respective narratives

Mountains have gained recognition as policy targets over the last century, leading to specific programmes intended to support, respectively secure particular functions attributed to those areas. While these activities were at the beginning rather complementary approaches, conceived to relieve the detrimental effects of extending market forces and primarily complementing deficiencies of restricted competitiveness in mountain and remote regions, more profound concepts by and by gained importance and favoured



“integrated” policy consideration. At the same time, the incumbent policy changes are linked to how mountain development options are perceived, interpreted and designed in explanatory narrative frameworks. In the following, the policy evolution, particularly explicit in European countries, is briefly described, and afterwards interpreted in terms of shifting narratives, leading up to the current state of representation of mountain development issues.

4. Mountain policy evolution

Despite the difficulties in accessing and settling mountains, all over the world they have long been powerful places of awe, attractiveness and fascination to communities beyond the mountains themselves. Coping with ruggedness and harsh climates, valleys and slopes have been settled, and later on mountaineering became an exhilarating appeal of more and more mountain sites (Macfarlane 2003). As market influence and interrelation increasingly extended and reached out to remote areas, pressures on mountain regions altered local economies and called for policy regulation. At the end of the 19th century, forest legislation addressed mountain concerns; then, from the beginning of the 20th century, agricultural policy action began to be conceived, and from the 1970s onwards the commitment to comprehensive integrated policies gained significance (Barruet 1995). There is little awareness and documentation of these early policy activities, but for several decades concerns for “mountain” policy have been addressed by an increasing number of European, and by and by also non-European countries. This led to policy concepts targeting integrated mountain policies, including an integrated perspective of the interconnectedness and combined effects of sectoral policies (forestry, agriculture, infrastructure, mobility, public services, regional and environmental policies, etc.) and a search for territorial cohesion of mountain programmes (Dax 2008). A recent global survey of governance in mountain socio-ecological systems revealed that beyond a few formal regulation concepts (through explicit “mountain policies”), a wide range of informal regulation frameworks is applied (Tucker et al. 2021). Elaboration of respective policy approaches is particularly supported by institutionalization of mountain issues, including a notable recognition in global discourses of human-nature relations. This recognition of the global relevance of mountain sustainable development (Ariza et al. 2013) is highlighted by the declaration of the UN International Years of the Mountains (2002 and 2022), with the outcome of the proclamation of the current “Five Years of Action for the Development of Mountain Regions” (2023-2027).

5. Changing narrative thinking

Since long it is uncontested that managing the Earth’s ecosystems is an interdisciplinary challenge (Daily and Ehrlich 1999). In particular, for the elaboration of mountain resilience strategies and action (Wyss et al. 2022), the awareness of the fundamental services provided by mountain regions (Chakraborty 2020) and the need for the integration of local perspectives through transdisciplinary methods have been underscored (Otero et al. 2020; Ibarra et al. 2023). In order to understand the complex interrelations of mountain social-ecological systems, it is therefore crucial to apply inter- and transdisciplinary methods enabling the elaboration of new narratives on mountain research that address pressing societal challenges.

Few studies have synthesized the spatial practices and policies in the great diversity of mountain regions in a comparative way. In Europe, the first one encompassing the whole continent was carried out at the beginning of the 2000s and revealed the predominance of sector-based policies and fragmented initiatives for mountain areas (Nordregio 2004). Multi-sectoral approaches and/or specific “mountain laws” in some countries and regions underscored the reasoning for place-based mountain development action and enhanced policy coordination (Price 2010) as well as the vision for territorial cohesion (Gløersen et al. 2016).



Table 1. *Divergent Narratives for Mountain Development, with main characteristics and policy focus*

Narrative	Core argument	Challenges	Assets	Policy focus
Less-favourable conditions	Harsh climate and production handicaps for land use	Limited efficiency of agricultural and forest production; difficult market access; hardly adequate scale for market integration	“traditional” images of niche products; alternative options; local examples of aberration	Less-Favoured Areas (LFA) policy; niche markets support
Ecologically sensitive areas	Threat of ecological loss and conservation need due to mountain features	Loss of biodiversity and ecological value; natural disaster prevention	Places of retreat, consumption, countryside and natural experience and awe	Nature conservation policy; Zoning areas of protection
Peripheralization	Difficulties in access, due to remoteness; and obstacles to economic integration and well-being	Ruggedness and remote locations; lock-in and perpetuating downward-spiralling process of economic and demographic decline	Advantages of low-densities and alternative outlines	Territorial Cohesion Policy (CP); infrastructure development, service provision
Land abandonment	Downward spiral of reduction in land use, loss of agricultural and landscape diversity, resulting in out-migration	Outcome of “traditional” views on predominance of high pressures in mountain areas; hardly any counter-acting policy, but rather structural policy as further driver	Relaxation of threat to reduced ecological quality; new options for less-intensive land use systems	Common Agricultural (CAP) and Rural Development Policy (RDP), partly; structural adjustment
Functional exchange	Provision of substantive ecosystem services; interrelation with lowland areas	No market signals for remuneration of ES so far; provider and user are located far from each other and no direct communication; often delayed and long-term effects	Visibility of positive functions and services provided from mountains; transparency of public goods enhances spatial balance and bargaining power	Public goods remuneration; Ecosystem Services (ES) payments; “smart” approaches; mountain-lowland exchange
Local assets and attractiveness	Important assets available, shaping place-specific amenities and attractiveness	Local knowledge of specific assets threatened; embedded in small places, no “economies of scope” applicable; high diversity of place-specific assets and wide range of values of attractiveness	Nature; nature-based resources; landscape diversity and tourist landmarks; concept of atmosphere; adventure and sports	Place branding support; designation of origin and geographical indication; Asset Based Community Development (ABCD)

Source: based on Copus and Dax 2011; and Dax 2022

While mountains have been perceived in vernacular discourse as constant and hardly changing topography, this has never been valid in a long-term perspective (Price 2015). However, the actual perceptions of mountain agency also changed dramatically over the last five decades. A number of different perspectives for addressing mountain challenges and opportunities can be discerned. The list of six particular views on mountains' role emerging over this period indicates the shift in narrative thinking (Table 1). However, the various perspectives on mountain support action are overlapping in time and space. Narratives might be contested by various actors and in different places according to contextual discourse. The perspectives exposed are representative of the most influential views on explaining mountain



development approaches over the past decades, but appear up to now in an overlapping pattern according to spatial and group-specific notions of grasping triggers of mountain policy:

- The first impactful European policy measure for mountain areas elaborated in the 1970s was conceived as agricultural compensatory allowance for Less-Favoured Areas (LFA), thus termed LFA policy and particularly essential for mountain areas of livestock production in the EU and at that period non-EU countries like Switzerland, Austria and Norway. The idea was to alleviate agricultural productivity constraints and higher costs in mountain land management through these (partial) compensation payments (Dax and Hellegers 1999). Later on, this policy instrument was relabelled as Policy for “Areas with Natural Constraints” (ANC), indicating the close relationship to its natural condition as an explanatory factor for production difficulties (EC 2023).
- Already the LFA concept addressed ecological sensitivity of LFAs and mountain areas as main criteria for granting payments, a view that was particularly enhanced through discourses of the 1990s and 2000s on the “rural development” framework, arguing that these areas provided a wide set of essential public goods and ecosystem services, and mountains could be seen as “ecological backbone” (Price 2010; Grumbine and Xu 2011, Nigmann et al. 2018). Valuing the natural characteristics of mountain areas, protection of large areas gained particular significance, often linked to landscape preservation, disaster prevention and ecosystem services provision (Schirpke et al. 2022).
- The discussion also highlighted the differences in policy implementation and revealed low LFA policy realization and impact in regions and countries of highest need. These were in general equated with remote regions and thus learning processes aiming at transformation of knowledge and policy approaches gained increased relevance (Price 2011, 167; Glass et al 2018).
- Some countries called very early for an “integrated mountain policy”, including various sector activities, infrastructure investment, socio-cultural and ecological considerations as key for a joint policy approach, with some of them even achieving a legal framework of a “mountain law” as backdrop of support (e.g. France, Italy, Bulgaria and Georgia). In general, integrative concepts turned into a widely used buzzword and concept (Kotsios 2016), even taken up at EU-level (EC 2009) but with limited implications for policy. Focus on local schemes and implementation remained the rule (McAreavey 2006) and was referred to through the LEADER programme as a “magic” instrument of social innovation in local development (Slee et al. 2023).
- Due to difficult market access and structural obstacles for product elaboration, concepts in mountain areas focused on “niches”, “quality-production”, “geographical indication” (Santini et al. 2013) or enhancing use of place-linked assets through enhancing specific mountain value chains (Smith et al 2026).
- In view of balanced and sustainable development, concern for the multitude of challenges, pressures, and traps of mountain regions is sensible (MARGISTAR COST Action; Klein et al 2019; Sarkki et al. 2025). Mountain regions can only cope with these overwhelming challenges if opportunities are addressed explicitly and functional exchange with lowlands becomes balanced in the sense that non-market services are valued appropriately.

The current predicament is the increasing complexity of challenges due to climate change and the ensuing increase of pressures, risks, and visibility of traps for mountain socio-ecological systems. Building on redesigned narratives that overcome the failures and lock-ins of previous primarily growth-oriented approaches, future action needs to go beyond the nature/society divide and accommodate ecological trends in mountain development patterns. The kind of changes alluded to by this narrative shift intends to overcome failures in theoretical and conceptual considerations based on severe “hidden biases” on primarily economic valuation and quantified estimation of outcomes (Cherif et al. 2024). These ongoing changes



have substantial repercussions also on areas outside mountains, amplifying the perception and need to cope with detrimental ecological and socio-economic changes in mountain regions. One of the strongest examples of the tight interlinkages of mountain and lowland areas is water management of many mountain ranges and the rising threats experienced in lowland areas due to higher fluctuations in run-off, extended periods of drought and, on the other hand, a much higher probability for extraordinarily intensive flood events. It is of outstanding urgency to address the complexity of issues with negative implications for biodiversity, ecological resilience and habitability of mountain areas (Schneiderbauer et al. 2024) to attain sustainable mountain development pathways, and ensure socio-ecological functions for both mountain areas themselves and lowland areas depending on their provision.

The thrust of messages on mountain futures is still characterized by severe challenges of land management and peripheralization processes. Land abandonment (Dax et al. 2021) and out-migration (Copus et al. 2020) are considerable ongoing threats for the majority of mountain areas. Yet, in recent years, a great number of studies have highlighted that a turn in perspective is essential in achieving sustainability goals. Examples of recent EC Horizon research projects underpin the emerging new perspectives on mobility issues, including a rising interest of newcomers in mountain regions (e.g. EC projects MATILDE and PREMIUM_EU), on the crucial role of social innovation in marginal areas (e.g. EC-project SIMRA), the increasing awareness of opportunities of rural regions (e.g. EC-project SHERPA) the potential of new views on shaping mountain value chains (e.g. EC-project MOVING), and the capacity to adapt to climate change and to sustainable and resilient transitions (e.g. EC-projects MOUNTRESILIENCE and RUSTIK). Even if policy support to enhance the provision of public goods and to compensate for the consecutive market failures remains crucial, the recognition and valuation of opportunities for mountain regions becomes ever more decisive. Focus on inherent assets and products and services of mountain areas made available for lowland areas underpins the enormous potential of mountain features for society. Remoteness is thus no longer just a development trap but can become an asset if embedded in adjusted narratives (Dax et al. 2022). Recent narrative considerations put priority on local involvement, fruitful communication, transformative exchange, strengthening of community capacities, awareness and recognition of upland-lowland interrelations, and long-term commitment appreciating place-sensitive assets in mountain areas.

6. Discussion of enabling narratives for mountain regions

As underpinned by the above review of research trajectories, policies impacting on mountain regions primarily first addressed land management schemes (protective forest management and mountain farming support) in order to sustain the viability of sectors and ensure the habitability of these areas, and later on were extended to include more balanced options. Thus, mountain policies are increasingly based on an understanding of extended strategies (Dax 2020, 10ff.) integrating:

- Inter-related biophysical and socio-economic changes
- Importance of linked scales to cope with threats of fragmentation at local scale
- Neither exaggerate multidimensional views of hostile environments, lagging and “backward” societal and economic features, nor idealize pristine nature and tranquility
- Seeing rural amenities as “a wide range of natural and man-made features” (OECD 1999) with potential to divert from growth paradigm (Bina 2013)
- Accepting nature-human inter-linkages as pivotal drivers of desired sustainable development trajectories
- Complementing “endogenous” views with complex inter-related perspectives, encapsulated in ideas of “neo-endogenous development”



- Commitment to inter- and multi-sector policy coordination, multi-level governance arrangements, based on strong institutions and recognition of local specificities and strengths.

An improved understanding of spatial integration of mountain-lowland linkages (water; energy; tourism; climate change effects etc.) is particularly expressed in comprehensive assessments of the complexity of drivers, actors and discussion of opposing scenarios for sustainable futures, as available for the best resourced mountain ranges of the Alps (Chilla et al. 2018) or the Himalayas (Wester et al. 2019).

Considering mainstream narratives and related policy failure and conceiving the desired shift towards perspectives that guide action of sustainable development necessitates an “open” mind for comprehensive assessment of mountain places’ potentials. This implies a deliberate decision to engage in action to change mainstream narratives (Novikova 2025) by carrying out a process that harnesses the “power” of narratives, including their power for socio-cultural changes (Plough 2020). It should be remembered that useful narratives should not be seen as closed systems of strategic views but enhance the intensive exchange of perspectives and views geared towards beneficial local action and provision of public goods for communities at large. The danger of rigid rules of opposing narratives must be avoided. Hence, the following criteria supportive of the envisaged shift would be essential:

- All relevant sectors and local and regional activities have to be addressed and their inter-relations considered in shaping strategies, programmes and future trajectories of mountain regions (Dax 2023). This requires inter-and trans-disciplinary research approaches that combine different viewpoints and research visions (Otero et al. 2020).
- An assessment of the various spatial scales and specific roles and linkages is crucial in assigning particular place-sensitive roles to actors. Any spatial assessment on mountain areas alone should be avoided, and interrelation and exchange aspects with lowlands need to be taken into account comprehensively (Klein et al. 2019).
- Spatial specificities should not be viewed as immutable but contingent on a series of short- and long-term drivers. For mountain regions, many of those influences would deploy over long periods and thus might easily be overlooked; nevertheless, strategic considerations should take account of the dynamic nature of local endowments and interconnectedness of socio-economic evolution (Suitner et al. 2025).
- The focus of addressees should be placed on both internal actors and the wider “audience” of national communities and global structures, implying that the provision of essential goods and services at cross-boundary scales has to be conveyed so as to achieve approval to changed conceptual frameworks, shifts in (support) policies and exchange relations, and implications on influential regulations as well as large-scale value structures (Tucker et al. 2021). Shaping institutional change is hence fundamental to bring about the respective shifts in thinking, theorizing and explaining worldviews of mountain contexts.
- So far, predominant storylines describe spatial relationships as polarized, and mountain regions as dependent areas to be supported “against” general (neoliberal) market forces favouring central locations. This “defensive” notion is deeply enshrined in the consciousness of mountain and lowland populations, hampering visionary concepts and forward-looking activities in mountain areas. A strong embedding of concepts in neo-endogenous approaches might be useful to overcome this lock-in and circumvent action lines that often lead into dead ends (Dax 2020).
- Narratives have to be assessed against balanced views on options for mountain regions. This includes a realistic perspective on structural conditions and institutional bottlenecks, with a wide range of persisting problems and inherent challenges due to particular spatial contexts. Assertions of a technologically neutral playing field between different types of spatial categories seem misleading and hamper any improvement to negative development trajectories. On the contrary, it is essential to expose these structural deficiencies explicitly. However, at the same time, renewed narratives should emphasize the overlooked aspects of place-specific opportunities for mountain regions, in particular



highlighting nature-based assets, amenities of remote areas and all aspects of intrinsic capital linked to these specific areas (Kristensen et al. 2019)

7. Conclusion

This paper starts from the premise that “(t)here is a consensus by both scientific and nonscientific experts that healthy and sustainably managed mountain social–ecological systems play a critical role in contributing to the well-being of both highland and lowland populations” (Schneiderbauer et al 2024, Vol.2, 1). No doubt, public goods and ecosystem services provided by such systems to areas and communities beyond the mountains themselves is widely recognized in all parts of the world as a growing number of studies in different mountain contexts and global institutions underline (Schirpke et al. 2022). Relevant examples range from the great role in providing freshwater and biodiversity hotspots, natural resources and amenities to increasing attractiveness for sustainable tourism experiences.

The core role of mountains in safeguarding nature, ecosystems and sustainable land use is a mantra increasingly diffused by international institutions, taken up by science and evolved over thematic research programmes, deepening findings on long-term societal, cultural and ecological effects. In particular, with climate change challenges, studies on mountain regions' contribution to mitigating the impending threats gained particular global relevance (Adler et al. 2022). The changes required for mountain agency imply a shift in conceptualizing mountains not primarily as defensive places but as places inherently endowed with place-specific options and alternative development pathways. Emerging narratives in this direction should be strengthened to emphasize this potential and provide the underlying foundations for beneficial action and the long-desired turn of downward-spiraling processes.

The review of mountain studies and policies reveals very clearly that policies so far predominantly addressed productivity obstacles of land management schemes (protective forest management and mountain farming support) in order to compensate disparities, relieve sector production weaknesses, and contribute to the habitability of these areas. However, with ongoing market integration and the effects of climate change, the effects of those policies were limited, and threats due to climate change challenges increased both for mountain areas and interrelated lowland areas. Narratives for mountain policy and agency hence require a reconstruction of the notion of place-specific functions and roles of mountain areas. Such a rearrangement would be oriented at extended strategies that would consider the numerous aspects to be kept in mind when shaping frameworks for spatial action of mountain regions (Dax 2020, 10ff.). The most important issues are:

- Assess local impacts as inter-related drivers of both biophysical and socioeconomic changes
- Cope with the superficial view of the double face of mountains, either as “idyllic” places or as “barriers” and hostile environments
- Appreciate “rural amenities” in mountains, through a wide set of natural elements, including wilderness, cultivated landscapes, but also historical monuments and cultural traditions
- Shape understanding of nature–human inter-linkages, to become a pivotal driver of future environmental and socio-economic development
- Complement “endogenous” frameworks through the inclusion of exogenous drivers and the complex role of innovation processes
- And raise commitment and establish consensus for inter-sectoral policy coordination, multi-level governance arrangements, and trans-disciplinary research approaches.

Concluding from this complex array of fundamental issues, narratives for mountain regions do not represent a rigid framework of fixed strategic tools and activities or just extended policy support, but prosper from the discourse of inhabitants of these places and people beyond mountains. Increasing awareness on the different perspectives and views on mountain agency would lead to alternative scenarios and raise the scope of potentials available. The task of conveying the ideas of functional exchange, provision



of essential public goods and services, and hence the specific role in climate change mitigation is at the outset of creating new potent perceptions, convincing narratives and strategic programmes that differ from growth-centered unilateral trajectories that won't change harmful decision patterns and policies. Such a renewed perspective leaves scope for elaborating new explanations, visions and paradigms encouraging the values of remote locations and facilitating mountain development.

Funding Information:

We gratefully acknowledge funding for analysis in the EC Horizon2020 projects MATILDE ("Migration Impact Assessment to Enhance Integration and Local Development in European Rural and Mountain Regions", grant No. 870831) and RUSTIK ("Rural Sustainability Transitions through Integration of Knowledge for improved policy processes", grant No. 101061051) that served as the basis for the drafting of the paper.

Conflict of Interest Statement:

The authors declare no conflict of interest regarding this paper.

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