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Mountain Regions: A Global Common Good?

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The concept of "commons" is complex; it may relate to property regimes, rules of use and access, recognition of collective importance, or a mixture of these. This paper explores the arguments—developed by a growing epistemic community—to promote mountains as global common goods within the third category. This process may be viewed as starting with the UN Conference on Environment and Development (UNCED) in 1992, and continuing, in particular, through the International Year of Mountains 2002. It has been supported and advanced by focused publications, the establishment of global networks, and advances in technology. Specific arguments state that mountains are important because they provide ecosystem services that are vulnerable to climate change, are home to a significant part of humanity, including many who are disadvantaged, and are centers of cultural, religious, and ethnic diversity. Nevertheless, this proposal has been contested within the scientific community, and the implications for mountain people remain to be discussed.

Keywords: *Common goods; mountain people; globalization; epistemic community.*

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What is "common" and what is global in a "global common good"?

The statement that mountains belong to anyone or to everyone has become so frequent that it seems almost obvious to many people. Yet it can mean different and contradictory things: that private ownership does or should not exist in mountain regions; that local people or landowners cannot decide alone what to do and how to behave; that everyone should take care of mountains; that individuals can climb, hike, dig, collect plants, and so on wherever and however they want without any kind of constraint; or, alternatively, that mountains being everyone's good, only state administrations can decide what to do; or, for those who think that the nationalization of mountains is also a type of specific appropriation, that mountains should be the common good of humanity as a whole.

This diversity of meanings, and the diversity of scale levels for which such statements are made, should be examined seriously, for they can lead to huge misunderstandings and sharp controversies. A second reason to tackle this question seriously has been the growing interest in mountain regions in recent decades: the ongoing rush for water and raw materials such as minerals and timber; the growing will of states to control resources, border regions, and cultural minorities in the peripheral mountains of their territories; and the rise of a global concern and of global institutions for mountain governance.

To clarify the question, the first need is to differentiate the social and political meanings that are beneath such statements and the juridical dimensions associated with each one. We will limit the discussion to three wide meanings. The first relates to property regimes. When owned by a local community as a whole, land is said to be in common ownership, or "commons" (Ostrom 1990), a phenomenon with long-lasting traditions in mountain regions. Alpine pastures have often been such common properties, with either private or public status. State property is also very important in mountain regions that were more recently colonized—such as in North America, Australia, New Zealand, and Russia—and for areas where modern states wanted to appropriate national symbols (such as emblematic peaks) and fragile landscapes and ecosystems, often through expropriation and the creation of national parks and reserves (Debarbieux and Price 2008).

The second meaning of the idea of "commons" relates to rules of use and access to resources that can be independent from the property regime. The concept of a common pool resource has been defined according to this second meaning. Access to such resources is open to anyone, but, except when the resource has (almost) no limits (such as for sunlight at the global scale level), social or institutional rules are required to prevent too many people from threatening the resource. Mountain forests have often been considered in this way (Price 1990).

The third meaning leads to the examination of the collective importance given to something by a society, or collectivity of any size, in a less formal manner, beyond property regimes and rules of use and access—a meaning that diffuses in institutions and collective practices. Many authors refer to the notion of common good in such cases (Vogler 1995; Constantin 2002). One example is biodiversity. According to this third meaning, what would

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be a global common good? It would be something that is defined as of major importance by humanity as a whole (but can humanity express itself as such?) or by states, global institutions, and experts, and for which attitudes should be influenced. According to this, the UNESCO World Heritage list can be seen as an example of global common good (Frey and Pamini 2009), though there is no unanimity about this. Haas (1992) proposed calling such an assemblage of national and international institutions and scientists or experts involved in the shaping of a common idea an "epistemic community," relying on a common framing of a problem, a description of a reality, and a set of initiatives or solutions. This paper suggests that the idea of mountains as a global common good has been promoted by a specific epistemic community, and contested by people who were not willing to share the analysis and priorities defined by this epistemic community. Both the promoters of the epistemic community and some of its opponents are presented below.

The rise of a global concern for mountains

The key starting point of the rise of a global concern for mountains is the United Nations Conference on Environment and Development (UNCED), or Rio Earth Summit, in 1992 (Messerli 2012, in this issue). One major document endorsed at this conference is its plan of action, *Agenda 21*; chapter 13 of this is entitled "Managing fragile ecosystems: sustainable mountain development" (UNCED 1992). The inclusion of this chapter in *Agenda 21* followed extensive lobbying, particularly by the government of Switzerland, and was supported, in terms of evidence, by 2 publications: a report on the state of the world's mountains (Stone 1992) and an illustrated brochure made available to UNCED delegates (Mountain Agenda 1992). In his foreword to the former document, the president of the Swiss Confederation, René Felber, stated that "perhaps half of humanity depends in some way on mountain resources, such as water, energy, minerals, forests or recreation areas" (Stone 1992: xvii). To move toward the implementation of chapter 13, the Food and Agricultural Organization of the United Nations (FAO) was designated in 1993 as the lead agency, or "task manager." FAO created a "mountain coordination unit" for this purpose and convened an ad hoc Interagency Group on Mountains, which, despite its name, included not only UN agencies but also other international organizations and nongovernmental organizations (Price 1998).

In 1995, the Global Environment Facility, which involves 4 UN agencies, the World Bank, and regional development banks, identified mountain ecosystems as the subject of one of its 10 operational programs. In 1998 the UN General Assembly declared that the year 2002 would be the International Year of Mountains (IYM). The motto for the IYM was that "We are all mountain people." As noted by the Director-General of the Food and Agriculture Organization, "We are all dependent on mountains, connected to them, and affected by them" (Diouf 2002: 4). During the IYM, many UN agencies and national governments organized events and publications that highlighted various aspects of the importance of mountains to people at all scale levels. In the same year, at the World Summit on Sustainable Development, an International Partnership for Sustainable Development in Mountain Regions (Mountain Partnership) was established to facilitate coordination and cooperation between concerned states and organizations. Notably, the UN General Assembly has continued its attention to mountain issues, requesting reports and passing 5 resolutions on sustainable mountain development between 2002 and 2011. Thus, for 20 years, there has been an impressive coordination of various initiatives at the intergovernmental scale for promoting mountains as a major issue of global politics.

This global attention to mountains has been supported and advanced in three particular ways: First, in books (eg Stone 1992; Messerli and Ives 1997; Price et al 2004) and reports (eg Blyth et al 2002; United Nations General Assembly 2005, 2007, 2009) that have presented a wide range of arguments as to the vital importance of mountains to the global population. Second, through the establishment of global networks that foster either sustainable mountain development, such as the Mountain Forum, or the coordination of associated scientific research, such as the Mountain Research Initiative. Third, through advances in remote sensing and geographical information technologies that have permitted an evaluation of the quantitative importance of mountains as defined by height and slope criteria and in terms of human population. In particular, Kapos et al (2000) estimated that 24% of the Earth's land surface is covered by mountains; building on this analysis, Meybeck et al (2001), working with relatively coarse spatial data, estimated that 26% of the global population lived in and immediately adjacent to mountains, and Huddleston et al (2003), working with finer-resolution data, found that 12% of the global population lived in mountain areas.

Thus, the rise of a global concern for mountains can be seen though several global initiatives and many sources providing views (maps, syntheses, data, descriptions, etc) on mountains at the global scale level. However, this is not a sufficient basis for an argument that mountains as a whole should be a global common good. For this, we need to identify discourses that can express the common conviction of the stakeholders and their ways of explaining the importance of mountains for the global ecosystem and for humanity, and to evaluate their relevance in the current context.

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Biodiversity, ecosystem services, and climate change: mountains through the lens of global problems

One process through which the importance of mountains has been recognized at the global level derives from the proposition that they constitute a key component of the global ecosystem. The first sentence of chapter 13 specifies their importance as a source of water and biological diversity (as well as energy), and its second "program area" highlights the need for integrated watershed management. During the 1990s and early 2000s, the key role of mountains as "water towers" was reiterated (eg Viviroli and Weingartner 2004). Equally, the Conference of Parties to the Convention on Biological Diversity (CBD 2010), also signed at UNCED, recognized the need for projects to conserve and sustainably use mountain biodiversity in decisions at many of its meetings, and established a program of work on mountain biodiversity at its seventh meeting in 2004. Similarly, recognition of the particularly high biodiversity of mountains at the global scale led to the establishment of the Global Mountain Biodiversity Assessment in 2000 and to global assessments of mountain biodiversity (eg Körner and Spehn 2002).

Over the same period, increasing attention to ecosystem services led to the Millennium Ecosystem Assessment. One of the 10 chapters on specific systems in its "state and trends assessment" specifically considers mountain systems (Körner and Ohsawa 2005). This explicitly links the provision of water from mountains with their rich biodiversity.

Chapter 13 of *Agenda 21* states that "Mountains are the areas most sensitive to all climatic changes in the atmosphere" (UNCED 1992). Similarly, the UN Framework Convention on Climate Change (United Nations 1992), also signed at UNCED, states that "developing countries with fragile mountainous ecosystems are particularly vulnerable to the adverse effects of climate change." Given this concern, the Second Assessment Report of the Intergovernmental Panel on Climate Change devoted a chapter to the impacts of climate change on mountain regions (Beniston and Fox 1995), and, in 2004, the CBD program of work on mountain biodiversity recognized climate change as one of four key challenges to mountain ecosystems and species. There has also been considerable attention to the impacts of climate change on human systems, particularly in the context of changes in water supplies due to the melting of glaciers and changes in precipitation patterns; likely increases in the frequencies of extreme events; and the uphill spread of diseases affecting people, crops, animals, and trees (eg Price 2008). Thus, climate change is increasingly seen as a challenge relating to all of the issues outlined in this and the preceding paragraphs (eg Kohler and Maselli 2009), with implications for most, if not all, of the world's population.

In summary, the arguments for calling global attention to mountains in global conferences and initiatives have related particularly to 2 phenomena:

1. A growing focus on biodiversity, water resources, and climate change within a global consciousness about the Earth's features and resources.
2. A considerable volume of publications, produced by growing and globalized networks of scientists and experts.

Indeed, the idea of mountains as a global common good has emerged from the concurrent evolution of a globalized scientific knowledge and networks and rhetoric focusing on this scale level.

Mountain populations: whose common good?

As noted above, Huddleston et al (2003) estimated that 12% of humankind live in mountain areas. Beyond the recognition that this is a significant proportion of humankind, arguments related to the importance of mountain people have followed 2 main lines.

A first is that mountain people are particularly disadvantaged, especially in relation to food and water security, income and health, and particularly in developing countries. For instance, Huddleston et al (2003) estimated that about 50% of the rural mountain population in developing or transition countries were vulnerable to food insecurity. Mountain people in countries with a high proportion of mountains that are poor in economic terms tend to have relatively higher levels of undernourishment, lower access to water sources, and lower levels of women in wage employment in the non-agricultural sector (Wymann von Dach et al 2006). However, the economic conditions of people living in mountains are highly heterogeneous (eg Ives 1997); some mountain people, such as those living in touristic regions of industrialized nations, have high incomes and high standards of living, even in comparison to adjacent lowland populations. This is of great importance, showing a key limitation of any general statement on mountains from a human point of view. When adopting a global scale level for observation and analysis and promoting a mountain focus on global issues, there is a high risk of making generalizations about mountain people, as empirical knowledge proves how diverse are their conditions of existence, and that reliable and disaggregated statistical data are lacking, even in data-rich parts of the world such as Europe (eg European Environment Agency 2010).

A second argument is that mountains are centers of cultural, religious, and ethnic diversity. The regions of the world with the greatest diversity of language and religion (eg the Caucasus, the eastern Himalaya, and

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Papua) are said to be mainly located in mountain regions. Scientists have adopted three main different points of view in analyzing this diversity. A first group has focused on the sacred significance of mountains (Bernbaum 1997), promoting the idea that specific landscapes and senses of place induce specific religious beliefs and experiences. A second group has correlated this cultural diversity with the degree of biodiversity. This ecological approach has been also applied to sacredness itself by those who have focused on understanding relationships between religion and ecosystems (eg Verschuuren et al 2010). A third group has promoted a more political explanation: Mountain areas have often been refuges for people who tried to keep their cultural specificity when facing the homogenizing forces of centralized states (eg Scott 2009). This cultural diversity of mountain regions has been highly popularized through the media and has become one of the main motivations for a global and mass form of tourism—another major driver for global common goods.

The parallel between cultural diversity and biodiversity in mountain regions, made by the people and institutions who promote mountain regions as a global common good, has led to the idea that mountain regions should be considered as a living and exemplary proof of global diversity, and as a priority for their conservation (Debarbieux and Price 2008; Debarbieux and Rudaz 2010). However, this argument is highly controversial for the following reasons. First, the will of many so-called mountain people to reach modern standards of comfort and conditions of life, sometimes at the expense of their cultural traditions, cannot be ignored. Being a living set of beliefs and practices, highly linked to economic conditions, cultural diversity cannot be seen as a material asset liable to be protected by itself. Second, the main expectations of many of these mountain people, though not specific to them, are development and autonomy (Barkin 2012, in this issue). Promoting the idea of mountains as a global common good can lead to authoritarian and conservationist attitudes that may restrict both expectations. Such a concern has fueled social movements, local or global (such as the World Mountain People's Association), whose members are suspicious of any attempt to subordinate the daily condition of mountain people to any exogenous global agenda (eg Barkin and Dominy 2000).

Toward conclusions

As discussed above, an epistemic community comprising people, countries, and institutions has promoted the idea that mountains could and should be considered as global common goods, even if this phrase has not been explicitly used as far as we know. These proponents consider that the natural and cultural diversity of mountain areas should be treated as an asset of great value at the global level, and that the consequences of climate change and economic or cultural globalization in these areas should be assessed and, where possible, reduced.

However, this way of framing mountains and stating the problems related to them is highly controversial for various reasons. Mountains are a very large and heterogeneous category (Debarbieux 2004), and often a sensitive question for states wishing to maintain full sovereignty over their territory. Therefore the level of normativity of initiatives taken at the global or regional scale levels has remained quite low. In general, the concerned institutions have tried to develop joint initiatives, disseminate knowledge, and exchange experiences. Yet the process remains ambiguous with regard to the question of the rights of mountain people to decide about the future of the places where they live. On one hand, it is said that mountain people should get greater recognition, if not some kind of political autonomy, within national societies—as has already happened in some European states, though not for the reasons presented above; on the other hand, the trend of framing mountains as natural assets and fragile environments may lead to contradictions between conclusions and recommendations at the local and the regional or global levels.

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