archive ouverte UNIGE

http://archive-ouverte.unige.ch

Article

Representing Mountains: From Local and National to Global Common Good

DEBARBIEUX, Bernard, PRICE, Martin

Abstract

Since the United Nations Conference on Environment and Development in 1992, mountains have acquired global recognition as a specific issue in the promotion of sustainable development policies. Starting from the traditional roles of mountains for local societies and in modern geopolitics, this paper analyses the status that mountains have been acquiring though globalisation, and the modes of global mobilisation and recognition that have taken shape since 1992. Particular attention is given to the role of scientists, international organisations, some mountainous States, and "mountain people". The specific characteristics of this process are discussed and compared to those pertinent to other goods, especially 'geographical' or 'ecological' goods such as tropical forests and Antarctica. Though the globalisation of mountain issues is part of a wider process of the recognition of environmental and cultural goods at a global level, it may be seen as the first example of a new category of global common good: "global common regions" or "glocal common good".

Reference

DEBARBIEUX, Bernard, PRICE, Martin. Representing Mountains: From Local and National to Global Common Good. *Geopolitics*, 2008, vol. 13, no. 1, p. 148-168

Available at: http://archive-ouverte.unige.ch/unige:3978

Disclaimer: layout of this document may differ from the published version.



Representing Mountains: From Local and National to Global Common Good

Bernard Debarbieux, University of Geneva, Geneva, Switzerland Martin F. Price, Perth College, UHI Millennium Institute, Perth, UK To be published in Geopolitics, 2008

Since the United Nations Conference on Environment and Development in 1992, mountains have acquired global recognition as a specific issue in the promotion of sustainable development policies. Starting from the traditional roles of mountains for local societies and in modern geopolitics, this paper analyses the status that mountains have been acquiring though globalisation, and the modes of global mobilisation and recognition that have taken shape since 1992. Particular attention is given to the role of scientists, international organisations, some mountainous States, and "mountain people". The specific characteristics of this process are discussed and compared to those pertinent to other goods, especially 'geographical' or 'ecological' goods such as tropical forests and Antarctica. Though the globalisation of mountain issues is part of a wider process of the recognition of environmental and cultural goods at a global level, it may be seen as the first example of a new category of global common good: "global common regions" or "glocal common good".

INTRODUCTION

Over the past two decades, several authors have described and explained the rise of complex systems of heterogeneous stakeholders – States, Inter-Governmental Organisations (IGOs), Non-Governmental Organisations (NGOs), corporations, etc. - who build, often through processes involving considerable debate and disagreement, representations of new global issues (e.g., climate change, biodiversity, health policies), organise and orientate the public debate related to them, and sometimes influence national public policies and supra-national initiatives¹. This work has shown how globalisation, especially through transnational and unofficial initiatives, has dramatically altered the territorial sovereignty of modern States and changed their roles in developing and implementing supranational and transnational initiatives. To understand this process, it is useful to question institutional and geopolitical frames of analysis in two ways. The first is to examine the relevance of the analysis of the designation of general interest and common good – which is very efficient at the level of Nation States – for understanding the identification of, and collective action related to, specific issues at the global scale. The second is to question the specific ways in which academic, especially geographical, knowledge is mobilised to serve conceptualisation and action at the global scale.

Common goods, political legitimacy and scale of relevance

Modern Nation-States have acquired most of their legitimacy and efficiency in circumscribing the *general interest* – or the *superior interest of the Nation* – in building administrative institutions, and in promoting public policies toward this goal. Often, the concept of *common good* has been used for this purpose. In the popular meaning, this concept describes a specific *good* (e.g., pasture, forest) of which the property (e.g., the *commons*) or use (e.g., the *common-pool resources*) is shared by all members of a given community². Modern Nation-states have been able to impose a dominant, if not exclusive, mode of defining and designating *general interest* and *common goods*, sometimes through widening the meaning of

the related concepts (including security, health, and collective well-being). Recently, the capacity of Nation-states to define common goods has been challenged in at least two key ways: first, by local and regional protests or initiatives, when the cost of action in the national interest appears too high for local visions and objectives; second, by globalisation, as increasing attention to on transnational issues has led to the identification of the *global interest* and various *global common goods* such as health, oceans, or drinking water.

When considering this diversification of scales of relevance, it should be recognised that common goods which are meaningful at one scale can be meaningless, as such, at another. Local common goods can be meaningless at a global scale; a global common good may also be meaningless at a national or local scale. Consequently, it is important to understand what kind of global vision(s), carried by various stakeholders, can justify the identification of a global common good, and how such vision(s) and designation fit with and influence other visions and eventual designations at other territorial scales. Thus, this paper addresses the question of *geographical re-scaling* ³associated with the process of *glocalization*⁴. This approach also requires, as suggested by Beck⁵, giving up the implicit *methodological nationalism* largely dominant in the social sciences and international relations studies, and adopting a *cosmopolitan gaze*. This means, *inter alia*, that the visions and strategies of Nation-states must be analysed in a global context.

The designation of a global common good differs from that of local or national common goods not only in terms of spatial scale. At the global scale, there is no central authority which could argue that it has an exclusive legitimacy. Global common goods always emerge from conflicts or disagreement, especially when they are closely related to a specific ideology such as the *market*. Their emergence always results from coalitions of heterogeneous stakeholders – States as well as NGOs, IGOs and citizens – each promoting the good according its own criteria of relevance and needing to adapt the newly defined good to its own world⁶. In other words, the meaning of the good has to be *translated*⁷ in order to be shared and, at the same time, adapted to various cultural and institutional conceptions. In contrast to national or local common goods, global common goods never result from consensus or central authority. They result from heterogeneous meanings and shared interests, so that, under certain circumstances, they can appear legitimate at the global scale.

Geographical knowledge, common goods and territorial issues

Although it is impossible to agree on the nature or an exhaustive list of global common goods, it is possible to compare and contrast those that are not mainly characterised by their location (such as health, the atmosphere, or meteorological data) with those that are strongly associated with specific places and areas, such as World Heritage Sites and specific ecosystems, such as wetlands, oceans⁸, tropical forests⁹, and Antarctica¹⁰. The latter type deserves the specific attention of geographers, for two reasons: first, their identification requires specific academic, mainly geographical or ecological, knowledge; second, these places, areas, and ecosystems are usually parts of national territories and thus the concern of State sovereignty.

Following Foucault's and Lefebvre's proposals, several works in political geography and geopolitics have shown the decisive links between geographical knowledge, geopolitics, and the creation of the territorialities of Nation-States¹¹. The role of cartography, geographic information systems (GIS) and data bases in building state territorialities and national identities has also been underlined by these authors in critical geopolitics and by cultural geographers. This leads to two contrasting questions: is the rise of common goods at local, regional or global scales made possible by similar combinations of (geographical) knowledge

and power; or do such processes exhibit specific characteristics depending on their spatial scale, social features, or specific institutional arrangements?

One framework to address these questions is provided by Micoud¹², who underlined both the role of academic discourses and representations, and the role of institutions in the process of designating common goods, especially heritage sites and natural features, at local and regional scales. He identified three steps in the process: (1) the production of a specific iconography, making the good present in a collective imagination; (2) the production of discourses and arguments, usually borrowed from scientists, serving to rationalise the process and to 'naturalise' the common good; and (3) the production of rules of use which give a juridical status to the good. At the global level, the limited literature suggests that, despite differences in process, the modes may be similar. Three examples at the global scale are chlorofluorocarbons (CFCs), tropical forests, and Antarctica, as described below.

Analysing the process through which CFCs were banned during the 1990s, Haas suggested that such inter-governmental decisions result from the construction of *epistemic communities*. This concept designates an ensemble of policy-makers and professionals "with recognised expertise and competence in a particular domain and an authoritative claim to policy-relevant knowledge within that domain or issue-area" all sharing the same kind of knowledge and belief, a similar conception of the nature and social role of scientific knowledge, and a common rhetoric which opens the possibility of a common reference for political action.

Though Haas' proposal has been criticised because of its positivist formulation¹⁴, it encouraged several authors to be very attentive to the possible roles of scientific statements and beliefs in the value of science in the adoption of global policies. This proposal was further developed by Smouts¹⁵ in her study of the rise of tropical forests as a global issue. She concluded that the concept of "epistemic community" was far too simple; that many people involved in the controversy, especially people living in tropical forests, were unaware of scientific arguments; and that different scientific communities were involved in grounding controversial statements and policies in the academic debate. Scientific controversy appeared to be symmetrical to political disagreement.

Contrary to Haas and Smouts, Dodds' analysis with regard to Antarctica¹⁶ explicitly refers to *critical geopolitics*. He explains the various attitudes of States, such as India, New Zealand, and Argentina, toward the question of territorial appropriation of the polar continent and, later, toward the 1959 International Treaty which froze this process, the Law of Sea, and the hypothesis of conversion into a "common heritage". Antarctica is probably the only part of the Earth's surface whose territorial appropriation has been halted in order to fit to a more collective and global conception of resource and environmental management. Dodds' contribution is decisive in two ways: first, following others¹⁷, he succeeded in showing that recent geopolitics in Antarctica result both from scientific and environmentalist involvement and from disagreement between States; second, he showed the pivotal influence of geographical, especially cartographic, representations of Antarctica at various steps of the process.

Though Haas, Smouts, and Dodds all take into account the respective roles of IGOs, States, and scientists in the designation of global issues and in the promotion – sometimes successful (CFCs), sometimes not (tropical forests) – of policies at the global level, the three authors' proposals tend to differ when they come to question the nature of the cooperation-competition between the major stakeholders and the nature of the knowledge mobilised in the process.

Following or questioning several of the authors mentioned above, this paper first reviews the traditional status of mountains in modern geopolitics and, second, presents the growing diversity of stakeholders concerned by the recent globalisation of mountain issues, and the variety of their respective visions of what is, or can be, the global meaning of mountains – of what could justify regarding mountains as a new global common good. Subsequent sections identify contrasted attitudes among specific groups of stakeholders – especially Nation-States, scientists, and local people – and examine the kinds of knowledge and legitimacy taken into account in the process.

COMMON INTERESTS FOR MOUNTAINS: FROM LOCAL, TO NATIONAL AND GLOBAL SCALES

At local to national levels, commons have been designated in mountain areas for many centuries, first for communitarian reasons, and later for economic and geopolitical ones. In Europe, pastures and forests are frequently the property of municipalities or groups of individuals¹⁸ and the trend to privatise collective property during the 18th and 19th centuries had few consequences in mountain regions¹⁹. In North America²⁰, as well as in Australia, New Zealand and Russia, vast areas of mountain land became the property of federal, state, or provincial institutions during the 19th and early 20th centuries. In other parts of the world, the property regimes of mountain land have been very heterogeneous, but collective management regimes have also been common – not only for pastures and forests, but also for water management systems²¹. The importance of collective property or management in mountains has generally been explained by the benefits of cooperation in challenging environments.

From the 19th century, it has become increasingly common to consider mountains as a national common good for three reasons: 1) landscape and nature management has been highly influenced by the rise of tourism and nature conservation movements; 2) national policies in many European countries aimed to manage mountain forests as important ecosystems for regulating water supplies for a significant proportion of the national territory²²; 3) nationalism and geopolitics promoted many mountains and mountain locations as national landmarks²³ or places of strategic importance according to the *natural borders* principle²⁴. These factors encouraged national societies and modern states either to increase the proportion of public property in mountain areas or to control the rights of uses of local owners and municipalities, sometimes in a very authoritative way. Through colonisation, this concept spread to tropical countries, through the drawing of borders of newly independent countries, nature reserves, or national parks and for water management²⁵. Particularly since the 1960s, several European states - notably Bulgaria, France, Italy, Romania, Switzerland, and Ukraine – have adopted specific legislation for mountain areas²⁶. Such legislation has led to the adoption of specific policies related to agriculture, urbanisation, and nature conservation. Most of these strategic, political, and economic initiatives were driven by the idea that mountain regions, though often considered peripheral, deserved special attention in the national interest.

A third step, and a third scale of relevance with regard to the recognition of the collective status of mountains, occurred during the late 20th century. The United Nations Conference on Environment and Development (UNCED), in 1992, saw the adoption of two major global treaties – the Convention on Biological Diversity and the United Nations (UN) Framework Convention on Climate Change – and 'Agenda 21'. The 13th chapter of the latter (referred to below as Chapter 13), which is devoted to mountain areas, was initially not widely noticed²⁷. This chapter – 'Managing Fragile Ecosystems: Sustainable Mountain

Development' – stated that mountains should be treated as a major issue for sustainable development and the implementation of related policies.

Chapter 13 represented the first time that mountains appeared, as such, in an intergovernmental declaration. In 1993, the Food and Agriculture Organization of the United Nations (FAO) was designated as the lead UN agency for coordinating inter-governmental actions for the implementation of sustainable development policies for mountain areas. A 'Mountain coordination unit' was created in the headquarters of FAO for this purpose; and other UN agencies have been involved according to their own competencies, including the UN Educational, Scientific and Cultural Organisation (UNESCO) for cultural issues, and the UN Environmental Programme (UNEP) for environmental ones²⁸.

In 1998, the UN General Assembly (UNGA) declared that 2002 would be the 'International Year of Mountains' (IYM)²⁹. During the IYM, several IGOs, particularly FAO, UNESCO, UNEP, and the United Nations University (UNU) organised diverse events and publications to highlight specific topics and issues. A total of 78 countries established national committees; some, such as France and Austria, took advantage of the IYM to foster national reflection about mountain development or policies³⁰; and some organised major international conferences – such as Italy, Switzerland, and Kyrgyzstan, which hosted the final global event of the IYM, the Bishkek Global Mountain Summit³¹.

The World Summit on Sustainable Development (WSSD), which also took place in 2002, provided a further good opportunity to highlight UN initiatives for mountains. At the WSSD, an International Partnership for Sustainable Development in Mountain Regions (*The Mountain Partnership*) was established in order to facilitate direct coordination and cooperation between the more involved States and the main stakeholders³². By May 2007, this Partnership comprised 137 members: 47 states, 15 IGOs and 80 other groups³³. The UNGA has continued its attention to mountain issues. The IYM concluded with a debate on mountain issues in the UNGA, which passed a resolution *inter alia* supporting the Mountain Partnership and requiring the Secretary-General to report on progress on sustainable mountain development. The resulting report was debated at the 60th session of the UNGA in November 2005, and it will consider a new resolution on sustainable mountain development in late 2007.

CONTRASTS IN THE ATTITUDES OF STATES TOWARD THE GEOPOLITICAL ROLE OF MOUNTAINS

In the process of the globalisation of mountain issues, IGOs have played a central role, especially through international conferences and the work of small but active teams of officers. Nevertheless, the policies of IGOs need to be backed by their member States, and their initiatives often emerge from power struggles between these States. A first step of this analysis is to compare the various strategies adopted by different States in this process, and to measure the costs and benefits they have evaluated.

The Secretary-General in charge of preparing UNCED, the Canadian Maurice Strong, was very eager to give mountains the opportunity of international recognition, mainly for ideological reasons. He deeply believed in the possibility of treating mountains as an exemplary case for implementing sustainable policies at a global scale. Some States supported this strategy, while others strongly resisted.

For cultural and strategic reasons, Switzerland has been the leader of the first group. Switzerland was especially interested in Chapter 13 because this country, whose territoriality and national identity are closely related to the Alps³⁴, had developed important expertise in mountain ecosystems and economies (e.g., forest and water management, cattle raising). Its

public policies in international cooperation began in 1961 with programmes in mountain countries such as Nepal and Bolivia:

As an alpine country, Switzerland has claim to more than a hundred years of experience in sustainable mountain development. Its commitment to development cooperation is thus anchored in its own roots of experience. Over the past 40 years, the SDC (Swiss Agency for Development and Cooperation) has been engaged in an array of activities dealing with the sustainable development of mountain regions and many of its priority geographical areas are in fact alpine countries such as Bolivia, Nepal, Bhutan as well as Central Asia³⁵.

Although Swiss international cooperation has not been exclusively dedicated to mountain topics, the SDC has been eager to concentrate its resources on specific programmes, and those with mountain countries have been the most consistent through the decades. Moreover, since Switzerland joined the UN in 2002, its involvement in mountain issues appeared to be a good way to highlight a thematic competence useful for the international community. In 1991, during the four preparatory conferences for UNCED, the deputy director of the SDC, Jean-François Giovannini, strongly promoted this idea. The Swiss delegation in the UNGA, led by Jenö Staehelin with the help of Olivier Chave, played a decisive role in diplomatic networking.

In contrast, other States were reluctant to highlight the mountains, especially the USA and several tropical countries. The official position of the USA was to treat mountains as a marginal issue, especially compared with other geographically-defined areas such as Amazonia, which were perceived to deserve more attention. Moreover, the US delegation was not eager to see any initiative which might influence the management of mountains in the USA. Several other countries were also reluctant – partly for the same reason, i.e., the fear of losing sovereignty over a major part of their territory, partly for specific reasons. For example, China, Indonesia and Burma wished to minimise the attention given to their mountain people, often belonging to ethnic minorities deprived of official recognition and specific rights.

To introduce a specific chapter for mountains in 'Agenda 21', the SDC, thanks to close cooperation between Chave, Giovannini, and Strong, lobbied strongly and successfully for the support of tropical countries such as Bolivia, Peru, Nepal, Bhutan, Lesotho, and Ethiopia. Concurrently, a number of scientists and development professionals established the informal network 'Mountain Agenda', which produced a book³⁶ and policy-focused brochures for dissemination at UNCED³⁷ and, subsequently, the annual meetings of the UN Commission on Sustainable Development (CSD) which have followed the implementation of 'Agenda 21'. 'Mountain Agenda', together with representatives of interested States, was also behind the declaration of 2002 as the IYM³⁸, the special mention for mountains in the final declaration of the WSSD, and the creation of the Mountain Partnership. Switzerland also managed to involve other European States with strong public policies for mountains, such as Italy and France, in order to share the cost and widen the engagement of States in this project. This successful group of States and IGOs was also eager to urge certain tropical States to adopt policies more attentive to the fragility of mountain environments and the poverty and the marginality of mountain societies.

BUILDING THE SCIENTIFIC RECOGNITION OF MOUNTAINS AT A GLOBAL SCALE

In concert with the intergovernmental coordination, a group of scientists has played a major role in the global mobilisation around mountains. By the early 1990s, SDC had long associated Swiss scientists, especially a University of Berne team led by Bruno Messerli, who specialised in the physical geography of the mountains, in its cooperation programs. During the pre-UNCED sessions, Messerli and other members of 'Mountain Agenda', including other geographers, the Canadian Jack Ives and the Indian Jayanta Bandyopadhyay, were involved in drafting Chapter 13. Following the publication of a regional treatment of mountain issues at UNCED³⁹, SDC asked Messerli and Ives to edit a comprehensive book⁴⁰ to be published on the eve of the UN Special General Assembly in 1997 to review the implementation of 'Agenda 21'. Many other scientists were involved in developing and writing the book and the brochures published for the annual CSD meetings. Both books and the 'Mountain Agenda' brochures were compiled and produced with primary support from SDC.

The major aims of such cooperation between SDC and scientists are clear: to ground intergovernmental mobilisation on scientific expertise and to bring mountain issues to a broader audience. However, another aim appears very clear: both SDC and the leading scientists wanted to strengthen the global organisation of the scientific community which specialised in mountain research around the world. Several initiatives had begun well long before the UNCED-CSD process: major conferences in Munich (1974) and Mohonk (1986), the mountain project of UNESCO's Man and Biosphere (MAB) programme from 1973⁴¹, the UNU 'Highland-Lowland Interactive System' project (from 1977), and the foundation of the International Mountain Society and its thematic journal, *Mountain Research and Development* (MRD), edited by Ives, in 1981⁴². Nevertheless, the network fostered by the leading scientists with the help of the SDC and other organisations, particularly UNU and UNESCO, is original in a number of different ways:

- This community looked for recognition from major scientific institutions. Following the early example of the MAB mountain project, some of the major programmes and global databases launched within inter-governmental initiatives on environment such as Diversitas⁴³, the Global Terrestrial Observing System (GTOS)⁴⁴ and the Terrestrial Ecosystem Monitoring Sites⁴⁵ developed specific initiatives or modules on mountain themes. In particular, this partnership was institutionalised in the *Mountain Research Initiative* (MRI)⁴⁶, endorsed for promoting global research on mountain issues by several partners: the International Geosphere and Biosphere Program (IGBP), the International Human Dimensions Programme on Global Environmental Change (IHDP), GTOS, and UNESCO's MAB programme⁴⁷.
- A common scientific culture has been shaped through the organisation of several conferences around the world, and comparative research programmes and projects. MRD, renewed in 2000 with financial assistance from SDC, became the main medium for publicising these initiatives and disseminating their results. Moreover, some of the involved scientists have tried to promote the concept of *montology* for designating their academic speciality⁴⁸.
- Regional scientific structures have been created: the International Centre for Integrated Mountain Development (ICIMOD), established in Kathmandu in 1983 for developing applied research in the Hindu Kush-Himalaya; and regional scientific associations in Africa (African Mountain Association, 1986), the Andes (Andean Mountain Association, 1991), and the Alps (International Scientific Committee for Alpine Research, 1996). It is clear that these regional structures correspond to professional territories combining sites for field research, areas of shared knowledge, places for meetings, academic institutions of participating countries, etc.

Three features, related to (1) the process of objectivation of the mountains, (2) the rationalisation of arguments concerning the global character of mountains, and (3) the institutionalisation of knowledge, were common to these various scientific processes.

- (1) Though it may appear self-evident what a mountain is, the development of an objective definition of mountains according to logical and scientific criteria has always been challenging⁴⁹. While this has not limited the relevance of the notion in scientific analysis⁵⁰, the mountain science community needed a clear definition for organising data, analysis, and communication. For these reasons, it worked hard to agree fairly simple quantitative criteria (altitude, slope, and relief). In 2000, again with SDC funds, the UNEP-World Conservation Monitoring Centre, in consultation with scientists, policy-makers and mountaineers, developed a mountain classification using global topographic data obtained from satellites. This led to the identification of 35.8 million km² (24 per cent) of the global land area as mountainous⁵¹. This work had two major symbolic advantages: it became possible to clearly and consistently identify mountain areas on maps and thus to state that mountains covered a significant proportion of the Earth's land surface.
- (2) The work undertaken by the scientific community since 1990 has, as often as possible, been related to the global scale. Many scientific programmes underlined the importance of mountains for the global ecosystem, especially with regard to the provision of water⁵², and mountain ecosystems in the context of global biodiversity⁵³. Others focused on the sensitivity of mountain ecosystems to climatic and global change⁵⁴. Scientists and IGOs have adopted a rhetoric expressing the same idea: "The message has become clear: the mountains of the world, with their natural and human resources, are no longer only of local and national concern; they are a matter of global concern in the 21st century"⁵⁵.
- (3) Mountain scientists on one side, and national, regional, and intergovernmental institutions on the other, have developed close links: the latter to ground public policies on academic knowledge and authority, the former to take advantage of political recognition and be part of decision-making processes⁵⁶. In addition, scientists have benefited from funding for research that has supported policy initiatives.

These three features hark back to the conceptual trilogy adopted by Micoud⁵⁷, presented above for explaining the social construction of heritage and common goods. By objectifying mountains (1), arguing for their global importance (2), and working with institutions to define international recommendations and contribute to their implementation (3), scientists have been exploiting the three complementary modes suggested by Micoud. Consequently, the functioning and influence of this mountain scientific community, spearheaded by members of 'Mountain Agenda', seems to fit at first glance the concept of 'epistemic community' well. In addition, the alliance between a scientific community, some IGOs and some mountainous States has proved to be very effective in the promotion of the cause at the global level.

THE ROLES GIVEN TO AND TAKEN BY MOUNTAIN PEOPLE

A major issue in international mobilisation around natural or geographical objects is the role given to local people in diagnosing problems and implementing policies. If this issue is, for evident reasons, irrelevant for Antarctica, it has been highly relevant for desertification, tropical forest management, and nature conservation. In these contexts, two main theses have been argued. The first is that local people are considered to be responsible for the problem (e.g., slash-and-burn agriculture, overgrazing), so that policies mainly consist of restricting

conditions of practice. The second is that local people are regarded as being the most concerned by the problem - and very often the first victims, even if they may be partly responsible for their condition - and should be the main partners in any kind of policy related to their environment: "local traditions lead to less destructive practices (in tropical forests) than commercial exploitation of wood and radical deforestation for cattle raising".⁵⁸.

In the mountains of the North, the national policies of the late 19th century and early 20th century can generally be regarded as coming under the first thesis⁵⁹, as do the policies of several countries of the South which are unwilling to give official and political recognition to cultural minorities living in their mountains. However, during the second half of the 20th century, national policies in the mountains of the North and certain countries in the South have generally shifted to more understanding and cooperative attitudes (i.e., the second thesis): they have aimed to retain local people and support environmentally-sustainable livelihoods, though often retaining fairly close administrative control. In the recent globalisation of mountain issues, both IGO representatives and scientists have regularly defended traditional societies and livelihoods. Among the IGOs, the main initiatives have been taken by FAO, UNU, and UNESCO, whose mission is mainly related to social, economic, and cultural objectives. Among scientists, there has always been a strong demand, though often unsatisfied because of the relatively weak representation of social scientists in this community, for academic knowledge on local societies and cultures. The motivations have been both ideological – many scientists involved in this process express a real sympathy for mountain people and their specificity – and pragmatic – academic knowledge based in social science could improve the implementation of conservation policies.

Several research projects illustrate this attitude, on themes such as the re-evaluation of the roles of local mountain people and traditional practices with regard to floods in Bangladesh⁶⁰, spiritual ties between mountain people and their surrounding mountains⁶¹, and the ecological value of traditional practices⁶². Such research has regularly been justified by scientists and IGOs as well as NGOs: "(mountain) biodiversity can only be conserved when equal attention is given to cultural diversity"63; "Support is needed to recover and foster the cultural expression of mountain populations because mountain cultural diversity is a strong and valid basis for sustainable use and conservation of mountain resources"64; "(during UNCED) much of the focus has been on environmental issues. Mountain peoples have had insufficient opportunities to speak out for themselves. And yet they are a vital key to understanding mountains and to their conservation"65. Mountain people have also been presented as full stakeholders and major partners of any project in mountains: "Programmes of sustainable mountain development need to take cultural values, traditions, and preferences into account: if they do not, they will fail to engage local communities and other stakeholders whose support they need to be truly sustainable over the long term". However, such people have shown rather contrasting reactions to this invitation.

The involvement of mountain people

Two kinds of mountain people's initiatives may be distinguished, one being very closely associated with the cooperation between IGOs and scientists made explicit through the process promoted by 'Mountain Agenda', the other comprising political initiatives willing to complement this process.

A first class of initiatives is represented by the regional and global networks built to combine the competences of scientists with those of local people in applied research. At a regional scale, ICIMOD⁶⁷ and the Consortium for the Sustainable Development of the Andes (CONDESAN)⁶⁸ are good illustrations; the *Mountain Forum* is a good example at the global

scale. This network, primarily using internet-based communication, was founded in Lima, Peru, in February 1995, at a meeting which involved a diverse mix of scientists and representatives of NGOs and IGOs, including most of the original 'Mountain Agenda' group. It describes itself as "a global community of individuals and organisations promoting regional and global action towards equitable and ecologically sustainable mountain development. This global platform facilitates networking and capacity building of those involved in mountain communities and the sustainable development of mountain areas across the world"⁶⁹.

A second mode of involvement of mountain people has been more independent. It consists of associations, or networks of associations, of mountain people who want to be part of the process but as autonomous counterparts. The rise and the role of such complementary stakeholders, partly critical of intergovernmental initiatives, have been analysed for other global issues⁷⁰. For mountains, the most revealing initiative is the World Mountain People Association (WMPA). It was initiated by a French association of local and regional elected officials, the National Association of Mountain Representatives, a major lobbying organisation for the interests of mountain people both in France and at the European scale. During the IYM, the WMPA adopted a formal declaration – the Charter for World Mountain People – expressing the will to "construct the (global) community of mountain men and women" and to weave economic, humanitarian and cultural networks between them. However, this declaration also asked for autonomy and demanded recognition of the rights of local people in this international process of the recognition of mountain issues: "We want to recover control of our development. (...) we want to be the advocates of our country"⁷¹. Moreover, the WMPA regularly organises global (Chambery, 2000; Quito, 2002) and regional meetings of mountain people to express "mountain pride", initiate economic valuation and commercialisation of mountain products, and build strategic solidarity between people who conceive themselves as marginalised in their respective national contexts: for instance, these meetings have allowed Andean people to present a mountain identity complementary to the indigenous one that they express in national or regional contexts.

Since the WMPA was not initiated by IGOs and the more active States, and since it, to some extent, denied them the right to decide what the mountains of the world should become, it was initially regarded by UN agencies with some scepticism and hostility. Later, according to the philosophy of the Mountain Partnership, all these stakeholders gathered in Bishkek for the final conference of the IYM, and the WMPA joined the Mountain Partnership itself.

An alternative way of conceiving science, closer to the local people's needs and rights

As noted above, most scientists involved at the global level of the *mountain epistemic community* are physical geographers and biologists – though certain cultural anthropologists and human geographers have played important roles. One key reason may be that natural scientists are generally more used to comparative research than social scientists, and perhaps more eager to specialise in a specific kind of natural object such as 'mountains', 'forests', or 'deserts'⁷². Possibly more important, social scientists are more liable to be critical of national or international policies which could have social or cultural impacts, and which might call for 'social engineering' to be more efficient. Moreover, both natural and social scientists have been divided on the strategy to be adopted with regard to local people and associations. While one group of scientists has played a decisive role in the mobilisation at the level of IGOs, others have been fairly suspicious, fearing that initiatives at this level could lead to the acculturation of mountain people, the denial of their rights and autonomy, and the increased global integration of mountain regions. Some of these concerns have been expressed in the rare scientific meetings that have gathered scientists with rather contrasting strategic analyses:

We were acutely aware of our responsibility not to speak for mountain peoples, many of whom are linked into effective indigenous international networks, not to encapsulate mountain peoples in frozen images, nor to condemn them to deprivation through continued engagement in their traditional activities. We must be mindful of an abstract (and externally imposed) vision of ecological purity and cultural uniqueness that ignores the complex agency of mountain dwellers (...) We need also as scientists to examine the setting of our partial and plural knowledges and to make explicit our motives and politics as knowledge producers working within disciplines and institutions.⁷³

Such scientists have been preferred to work with local people and representatives, and within NGOs and associations rather than with IGOs. Founding members of the WMPA included the French social scientists, Jean Bourliaud and Denis Blamont, and they soon involved associations of scientists and technicians such as *Agronomists and Veterinarians without Borders*. Others, who would rather be kept anonymous, have expressed disappointment with the regional organisations of mountain scientists, which they regard as driven by institutional interests. To date, no structure has been built to allow these various scientists and these various concepts of applied science to join or communicate, though the Mountain Forum provides a platform for this, and contrasting views are often expressed in its discussion lists.

CONCLUSION

It is fifteen years since mountains were first specifically identified as a theme requiring global attention. However, since monitoring and quantitative information on specific mountain problems at the global scale are still lacking, it is impossible to measure the outcome of this initial inclusion in 'Agenda 21' and of the resulting initiatives. This paper, and the conclusions below, mainly address three other questions, much more related to its conceptual basis: 1) to what extent have Chapter 13 and subsequent initiatives reorganised the perception and status of mountains at different geographical scales; 2) what kind of global common good has been promoted through the globalisation of mountain issues; 3) what combination of stakeholders has emerged through the whole process, and what political conception of mountains has been illustrated through the various kinds of involvement of States?

How much have Chapter 13 and subsequent initiatives reorganised the perception and status of mountains at the various geographical scales?

The main hypothesis of this paper is that international and transnational mobilisation for mountain issues has aimed to make mountains a new global common good. In the introduction, we recalled the long history of managing mountain resources or entire mountain regions in Western countries as commons, common-pool resources, or common goods. Has the recent globalisation of mountain issues been an extension, to the global scale, of such a treatment of mountains? On one hand, it is possible to find some similarities between global recommendations and historical or recent national policies in the countries of the North, for instance with regard to the improvement of water management, conservation of landscapes and biodiversity, preservation of traditional mountain cultures, and the promotion of mountain policies. These aims can be found in official recommendations and, even more, in initiatives led by NGOs dedicated to addressing environmental or cultural issues. Consequently, the globalisation of mountain issues can be partly viewed as being a translation of western preoccupations at the global level. On the other hand, international and transnational mobilisation has also focused on other topics such as education, the struggle against poverty,

women's rights, and ethnicity. These goals stem from another political culture, that of human rights, which is largely independent of western visions of mountains. A further critical point is that the globalisation of mountain issues has relied on a new iconography, particularly new maps showing newly defined and circumscribed mountains, and carefully selected images of inhabited landscapes and local traditions. In order to become some kind of global common good, mountains had to be considered, presented, and illustrated in a new manner.

What kind of global common good has been promoted through the globalisation of mountain issues?

It is in this unusual association of very diverse aims that the main originality of the globalisation of mountain issues probably lies. Certain issues of central relevance for mountain areas are already on specific international agendas, e.g., the World Heritage Convention, the International Tropical Timber Agreement, UN conventions on climate change and biodiversity, and the Millennium Development Goals. Many of these global agreements and agendas can be linked to specific initiatives in mountain regions: for instance, in 2003, a third (57 out of 167) of the natural and mixed World Heritage sites designated by UNESCO were in mountain regions⁷⁴; several *hotspots* of biodiversity⁷⁵ are in mountain regions, and a programme for work on mountain biodiversity has been developed under the Convention on Biological Diversity⁷⁶; and the Millennium Ecosystem Assessment included a specific chapter on mountains⁷⁷. The structures deriving from Chapter 13, particularly the Mountain Partnership, do not aim to go further in such specialised fields.

Therefore, it appears that the mobilisation on mountain issues differs from mobilisation on thematic issues since the former encompasses a wide range of topics and proposes to treat them in a coordinated way. Mountains are promoted as a regional common good, i.e., limited in space and combining very heterogeneous and interacting goods, even more numerous than for other regional goods such as Antarctica and tropical forests. This statement leads us to two alternative proposals: we can consider either that mountains provide an excellent type of context for analysing the identification and the promotion of thematic global common goods; or that mountains specifically deserve to be seen as a global common good, due to the high interest of the association of factors and phenomena they represent, and/or due to the high degree of ethical and political issues relating to the question of local autonomies versus global interest.

The promotion of either of these concepts leads to different types of policies. The first encourages strong attention to the contextual articulation of thematic global policies, with mountains as a laboratory for theorising and implementing such an articulation. The second leads to global policies close to those adopted by some European countries in the late 20th century: recognition of the singularity of mountain milieus and regions, as well as of the importance of this singularity in a global world, and the definition and implementation of multi-level policies to assure the long-term perpetuation of such a singularity. In relation to the first concept, mountains are one of the many types of contexts for which specific common good policies deserve to be articulated. In relation to the second concept, mountains may be defined as global common regions or as a glocal common good, underlining both the regional character of the combination of factors and the global value of the high diversity of mountain regions – both biological and cultural⁷⁸. If this concept – though it is slightly paradoxical – is to be validated and then recognised, mountains would become the first of this type of common good, as foreshadowed by regional initiatives such as the Alpine and Carpathian Conventions⁷⁹ and other possible similar treaties under discussion, for the Balkans, the Caucasus, and the mountains of Central Asia. The global recognition of mountains as global common regions or as a glocal common good needs such initiatives at the regional scale, which is the correct level for implementation.

What combination of stakeholders has emerged through the whole process?

The third conclusion of this paper is that global attention to mountain issues has arisen from a rather original combination of interests, especially those of scientists, specific IGOs, certain mountainous States, and several groups of mountain people. States have adopted highly contrasting attitudes toward the necessity for a modern geopolitical conception of mountains, While this preoccupation appears to remain antithetical to States in the South which are authoritarian and eager to keep a close control on strategic areas, it has become obsolete for others, such as Switzerland, whose conception of mountains has opened the doors of UN agencies and enabled active participation with and between them. For States such as Bolivia or Nepal, the globalisation of mountain issues represents a major opportunity to have their environmental specificities considered in intergovernmental initiatives.

In contrast to the processes which led to policies for the management of European mountain forests in the late 19th century, in the past two decades scientists have been very eager to take local cultures and knowledge into account in promoting sustainable practices in mountain areas around the world, and many local stakeholders have been very active partners of the most motivated countries, IGOs, and scientists. For mountains, in recent years, the line of disagreement has not gone between scientists and mountain people, with each group being taken as a whole, but through both the scientific community and mountain populations. The main reason for disagreement has been the ideological question of local autonomy. Though the leaders of the globalisation of mountain issues have stressed the importance of adopting the "mountain perspective" some scientists and some representatives of mountain people have seen the top-down initiatives of UN agencies as a threat, and preferred to keep away from such processes or to promote alternative modes of reasoning and of globalising the issues.

Though the debate should not be understood in a Manichean way, its social and institutional agency reveals that the main stakeholders have adopted quite new visions and strategies. This globalisation of mountain issues has given birth to professional communities, regional institutions, and specific international programmes and associations which structure the overall process. It has fuelled multi-level reflections on similarities and differences among mountain populations, and between so-called 'mountain people' and their respective outer world, especially on cultural and political matters. This conclusion matches what has already been seen in other contexts⁸¹ (Constantin, 2002): the invention of a new global common good is a rhetorical process which fits the vision and the needs of stakeholders who rely on it to support their own legitimacy.

ACKNOWLEDGEMENTS

The research on which this paper is based was partially supported by grants from the Swiss Foundation for Scientific Research and the Boninchi Foundation (Geneva). We would like to acknowledge the essential contributions made by Bruno Messerli, Yuri Badenkov, Daniel Maselli, Jack Ives, Thomas Hofer, Olivier Chave and Jean-François Giovannini to the paper as it evolved, and to thank the leaders of the World Mountain People Association and many scientists for inviting us to their meetings. We are also grateful to Juliet Fall, Gilles Rudaz and the reviewers for their useful comments.

NOTES

1

² E. Ostrom, Governing the Commons. The Evolution of Institutions for Collective Action (Cambridge: Cambridge University Press 1990).

³ E. Swyngedouw, 'Neither Global nor Local: Glocalization and the Politics of Scale,' in K. Cox (ed.), *Spaces of Globalization: Reasserting the Power of the Local* (New York: Guilford Press 1997), pp.137-166.

⁴ Ibid; R. Robertson, 'Glocalization: time-space and homogeneity-heterogeneity', in M. Featherstone, S. Lash and R. Robertson (eds.), *Global Modernities* (London: Sage Publications 1995) pp.25-39.

⁵ U. Beck, *Cosmopolitan Vision* (Cambridge: Polity Press 2006).

⁶ L.C. Barbosa, *The Brazilian Amazon Rainforest, Global Ecopolitics, Development and Democracy* (Lanham: Oxford University Press 2000); F. Constantin (ed.), *Les biens publics mondiaux: un mythe légitimateur pour l'action collective*? (Paris: L'Harmattan 2002).

⁷ M. Callon, P. Lascoumes, and Y. Barthe, *Agir dans un monde incertain: essai sur la démocratie technique* (Paris: Seuil 2001).

⁸ E.L. Miles, *Global Ocean Politics* (Leiden and Boston: Kluwer Law International 1998).

⁹ D. Humphreys, Forest Politics: The Evolution of International Cooperation (London: Earthscan, 1996); D. Humphreys, LogJam: Deforestation and the Crisis of Global Governance (London: Earthscan, 2007); M.C. Smouts, Tropical Forests, International Jungle: The Underside of Global Ecopolitics (London: Palgrave MacMillan 2003).

K. Dodds, Geopolitics in Antarctica (Chichester: Wiley 1997); G.D. Triggs (ed.), The Antarctic Treaty Regime: Law, Environment and Resources (Cambridge: Cambridge University Press 1987).

¹¹ S. Dalby, 'Reading Rio, writing the world: The New York Times and the 'Earth Summit', *Political Geography* 15/6-7 (1996) pp.593-613; G. O'Tuathail, *Critical Geopolitics. The Politics of Writing Global Space* (London: Routledge, 1996).

¹² A. Micoud, 'Le bien commun des patrimoines', in *Ecole Nationale du Patrimoine*, *Patrimoine culturel, patrimoine naturel*, (Paris: La Documentation Française 1995) pp.25-38.

P. Haas, 'Introduction: Epistemic Communities and International Policy Coordination',
 International Organization 46/1 (1992) pp.1-35.

¹⁴ A. Hasenclever, P. Mayer, and V. Rittberger, *Theories of International Regimes* (Cambridge: University Press 1997); P. Le Prestre (ed.), *Governing Global Biodiversity* (Aldershot: Ashgate 2002).

15 Smouts (note 9).

¹⁶ Dodds (note 9).

¹⁷ For example, Triggs (note 9).

A. Sandberg, 'Against the Wind: On Reintroducing Commons Law in Northern Norway', Mountain Research and Development 18/1 (1998) pp.95-106; P.P. Viazzo, Upland

¹ J. Vogler, *The Global Commons: A Regime Analysis* (Chichester: Wiley 1995); F. Constantin (ed.), *Les biens publics mondiaux: un mythe légitimateur pour l'action collective?* (Paris: L'Harmattan 2002); O. Delas and C. Deblock (eds.), *Le bien commun comme réponse politique à la mondialisation* (Bruxelles: Bruylant 2003); I. Kaul, I. Grunberg, and M. Stern (eds.), *Global Public Goods. International Cooperation in the 21st Century* (Oxford: Oxford University Press, 1999); E. Ostrom, 'How Types of Goods and Property Rights Jointly Affect Collective Action', *Journal of Theoretical Politics* 15/3 (2003) pp.239-270.

- Communities: Environment, Population and Social Structure in the Alps since the 16th Century (Cambridge: Cambridge University Press 1989).
- ¹⁹ M. Neeson, Commoners: Common Right, Enclosure and Social Change in England, 1700 1820 (Cambridge: Cambridge University Press 1993); P. Vigier, Essai sur la répartition de la propriété foncière dans la région alpine: Son évolution des origines du cadastre à la fin du Second Empire (Paris: EHESS 1963).
- ²⁰ D. Meining, *The Shaping of America (1850-1915)* (New Haven: Yale University Press 1998).
- ²¹ S. Prakash, 'Preface: Social institutions and common property rights in the mountains', *Mountain Research and Development* 18/1 (1998) pp.1-3.
- ²² B. Kalaora and A. Savoye, *La forêt pacifiée: les Forestiers de l'Ecole de Le Play, Experts des Sociétés pastorales* (Paris: L'Harmattan 1986).
- ²³ S. Schama, *Landscape and Memory* (New York: A. Knopf 1995).
- ²⁴ H. Van Houtum, 'Geopolitics of borders and boundaries', *Geopolitics* 10 (2005) p 672-79.
- ²⁵ J.M. Mackenzie, *The Empire of Nature, Hunting, Conservation and British Imperialism* (Manchester: Manchester University Press 1988).
- ²⁶ A. Castelein, T.T.V. Dinh, M.A. Mekouar, and A. Villeneuve, *Mountains and the Law: Emerging Trends* (Rome: FAO 2006).
- ²⁷ S. Dalby, 'Critical Geopolitics: Discourse, Difference, and Dissent', *Environment and Planning D: Society and Space* 9 (1991) pp.261-283; D. Momtaz, 'The United Nations and the protection of the environment: from Stockholm to Rio de Janeiro', *Political Geography* 15/3-4 (1996), pp.261-271.
- ²⁸ M.F. Price, *Chapter 13 in Action 1992-97 A Task Manager's Report* (Rome: Food and Agriculture Organization of the United Nations 1999).
- ²⁹ Resolution 57/245, 78th plenary session of the UN General Assembly.
- ³⁰ B. Debarbieux, Rapport d'évaluation de l'Année Internationale des Montagnes en France (Paris: Datar 2004).
- ³¹ H. Hurni, 'The Bishkek Mountain Platform' *Mountain Research and Development* 23/1 (2003) pp.86-89.
- ³² T. Hofer and D. McGuire, 'Beyond the International Year of Mountains: A Preliminary Assessment by the FAO, the United Nations Lead Agency for IYM2002', *Mountain Research and Development* 23/1 (2003) pp.80-83.
- http://www.mountainpartnership.org/members/members_en.asp, accessed 3 May 2007.
- ³⁴ F. Walter, Les figures paysagères de la nation (Paris: EHESS 2004).
- http://coofweb.deza.admin.ch/index.php?navID=21887&langID=1, accessed on 3 May 2007.
- ³⁶ P.B. Stone (ed.) *The State of the World's Mountains* (London: Zed Books 1992).
- ³⁷ Mountain Agenda, An Appeal for the Mountains (Mountain Agenda, Bern 1992).
- ³⁸ The proposal had been officially made by Kyrgyzstan since Switzerland was not a member of the UN at that time. Information given by J.F. Giovannini, personal interview.
- ³⁹ Stone (note 35).
- ⁴⁰ B. Messerli and J.D. Ives (eds), *Mountains of the World: A Global Priority* (New York/London: Parthenon 1997).
- ⁴¹ M.F. Price, *Mountain Research in Europe: An Overview of MAB Research from the Pyrenees to Siberia*. Man and The Biosphere Series 12 (Paris and Carnforth: UNESCO and Parthenon 1995).
- ⁴² J.D. Ives, 'Along a steep pathway', *Our Planet* 131 (2002) pp.3-5.
- ⁴³ Global Mountain Biodiversity Assessment: see http://gmba.unibas.ch/index/index.htm, accessed on 3 May 2007.

- ⁴⁴ This system was created in 1996 by five IGOs (including FAO, UNESCO, UNEP) to coordinate and facilitate access to relevant information on ecosystems, especially for following the impacts of global change. The mountain module was created in 2004.
- 45 See http://www.fao.org/gtos/tems/mod_mou.jsp, accessed on 3 May 2007.
- ⁴⁶ See http://mri.scnatweb.ch/, accessed on 3 May 2007.
- ⁴⁷ A. Becker and H. Bugmann (eds.) *Global Change in Mountain Regions: The Mountain Research Initiative* (Stockholm: Royal Swedish Academy of Sciences 2001); A. Björnsen Gurung, *Global Change and Mountain Regions (GLOCHAMORE) Research Strategy* (Zurich: Mountain Research Initiative 2006).
- ⁴⁸ Though the word has been accepted by some dictionaries and institutions, its relevance is still subject to disagreement.
- ⁴⁹ Messerli and Ives (note 40); M.F. Price, I. Lysenko, and E. Gloersen, 'Delineating Europe's mountains', *Revue de Géographie Alpine/Journal of Alpine Research* 92/2 (2004), pp.61-86.
- ⁵⁰ B. Debarbieux and F. Gillet (eds.) *Mountain regions: A Research Subject?* (Brussels: European Commission 2000).
- V. Kapos, D.J Rhind, M. Edwards, M.F. Price and C. Ravilious, 'Developing a Map of the World's Mountain Forests', in M.F. Price and M. Butt (eds.), *Forests in Sustainable Mountain Development: A Report for 2000* (Wallingford: CAB International 2000) pp.4-9.
- ⁵² D. Viviroli, R. Weingartner, and B. Messerli, 'Assessing the Hydrological Significance of the World's Mountains', *Mountain Research and Development* 23/1 (2003) pp.32-40.
- ⁵³ C. Körner and E. Spehn (eds), *Mountain Biodiversity: A Global Assessment* (New York/London: Parthenon 2002).
- ⁵⁴ Björnsen Gurung (note 47).
- ⁵⁵ B. Messerli, 'From the Earth Summit 1992 to the IYM 2002: the Role and Reponsibility of Switzerland', in *Mountains and People: An Account of Mountain Development Programmes supported by the Swiss Agency for Development and Cooperation* (Berne: SDC 2001) pp.12-14.
- Messerli and Bernbaum have forcefully argued this point: while willing to improve interactions between scientists and policy makers, they suggested giving up an "historic model" where "the scientists analyse, interpret, evaluate and report (and) the politicians decide (...) whether they do or do not wish to use the scientific advice", a kind of relationship "which has never been satisfactory for solving highly complex problems". Simultaneously, they promoted an "assessment model" which incorporates "a dialogue between scientists and policy makers in order to bring about consensus on scientific understanding (but taking in account) the time-frame of interest to politicians": B. Messerli and E. Bernbaum, 'The role of culture, education, and science for sustainable mountain development' in M.F. Price, L. Jansky and A. Iatsenia (eds.), *Key Issues for Mountain Areas* (Tokyo: United Nations University Press 2004) pp.210-233.
- ⁵⁷ Micoud (note 12).
- 58 Smouts (note 9).
- ⁵⁹ Kalaora and Savoye (note 22).
- ⁶⁰ T. Hofer and B. Messerli, *Floods in Bangladesh: History, Dynamics and Rethinking the Role of the Himalayas* (Tokyo: UNU Press 2006); J.D. Ives, *Himalayan Perceptions: Environmental Change and the Well-being of Mountain Peoples* (New York: Routledge 2004).
- ⁶¹ E. Bernbaum, *Sacred Mountains of the World* (Berkeley: University of California Press 1998); The Mountain Institute, *Sacred Mountains and Environmental Conservation: A*

- *Practitioner's Workshop* (Franklin: The Mountain Institute 1998); J. Reinhard and C. Ceruti, 'Sacred Mountains, Ceremonial Sites, and Human Sacrifices among the Incas, *Archaeoastronomy* 19 (2005) pp.1-43.
- P.S. Ramakrishnan, K.G. Saxena, and U. Chandrasekhara (eds.), Conserving the Sacred: For Biodiversity Management (New Delhi: UNESCO and Oxford & IBH Publishers 1998); P.S. Ramakrishnan, K.G. Saxena, and K.S. Rao (eds.), Shifting Agriculture and Sustainable Development of North-Eastern India: Tradition in Transition (New Delhi: Oxford & IBH Publishers 2006).
- ⁶³ Ives (note 42).
- ⁶⁴ Commission on Sustainable Development, *Report on the Third Session* (New York: United Nations).
- ⁶⁵ K. Payne et al., *High Stakes: The Future for Mountain Societies* (London: Panos Institute 2002).
- ⁶⁶ Messerli and Bernbaum (note 56) p 212; see also R. Rhoades, 'Integrating Local Voices and Visions into the Global Mountain Agenda', *Mountain Research and Development* 20/1 (2000) pp.4-9.
- ⁶⁷ G. Rana, 'The International Centre for Integrated Mountain Development (ICIMOD)', *Mountain Research and Development* 23/3 (2003) pp.288-289.
- ⁶⁸ H. Cisneros, E. Mujica, and A.M. Ponce, 'Condesan: Watershed management and rural development in the Andes', *Mountain Research and Development* 24/3 (2004) pp.258-259.
- ⁶⁹ See http://www.mtnforum.org/, accessed 3 May 2007.
- A. Brysk, 'Hearts and Minds: Bringing Symbolic Politics Back in', *Polity* 27 (1995)
 pp.559-585; J. Smith, C. Chatfield, and R. Pagnuco, *Transnational Social Movements and Global Politics: Solidarity Beyond the State* (New-York: Syracuse University Press 1997);
 M. Keck and K. Sikkink, *Activists Beyond Borders: Advocacy Networks in International Politics* (Ithaca: Cornell University Press 1998).
- ⁷¹ See www.mountainpeople.org, accessed 3 May 2007.
- ⁷² D.C. Funnell and M.F. Price, 'Mountain Geography: A Review', *Geographical Journal* 169/3 (2003) pp.183-190.
- D. Barkin and M. Dominy, 'Mountain lands: regions of refuge or ecosystems for humanity?', in B. Debarbieux and F. Gillet (eds.), *Mountain Regions: a Research Subject?* (Brussels: European Commission 2001) pp.71-77.
- J. Thorsell and L. Hamilton, 'A Global Overview of Mountain Protected Areas on the World Heritage List', in D. Harmon and G.L. Worboys (eds.) *Managing Mountain Protected Areas: Challenges and Responses for the 21st Century* (Colledara: Andromeda 2004), pp.10-24.
- ⁷⁵ N. Myers, R.A. Mittermeier, C.G. Mittermeier, G.A.B. Da Fonseca and J. Kent 'Biodiversity Hotspots for Conservation Priorities', *Nature* 403 (2000) pp.853–858.
- ⁷⁶ E. Sharma and R. Acharya, 'Summary Report on Mountain Biodiversity in the Convention on Biological Diversity', *Mountain Research and Development* 24/3 (2004) pp.263-265.
- ⁷⁷ C. Körner, M. Ohsawa et al., 'Mountain Systems', in *Millennium Ecosystem Assessment:* Current State and Trends: Findings of the Condition and Trends Working Group. Ecosystems and Human Well-being, Vol. 1 (Washington, DC: Island Press 2005).
- ⁷⁸ M. Turin, 'Language endangerment and linguistic rights in the Himalayas: A case study from Nepal', *Mountain Research and Development* 25/1 (2005) pp.4-9.
- ⁷⁹ J. Fall and H. Egerer, 'Constructing the Carpathians: the Carpathian Convention and the Search for a Spatial Ideal', *Revue de Géographie Alpine/Journal of Alpine Research* 92/2,

(2004), pp. 98-106; T. Treves, L. Pineschi, and A. Fodella (eds), International Law and

Protection of Mountain Areas (Milano: Giuffre Editore 2002).

N.S. Jodha, M. Banskota, and T. Partap (eds.), Sustainable Mountain Agriculture (New Delhi: Oxford and IBH Publishing 1992).

⁸¹ Constantin (note 6).