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MOUNTAINS: FROM DIVIDES TO INTEGRATION – A SCOTTISH PERSPECTIVE
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Summary
1. This chapter considers the sources of conflict and the sources of unity in mountain areas. Positive attributes such as their iconic status, spiritual, aesthetic, biodiversity and earth heritage attributes are noted. Many negative attributes, such as natural forces and human conflict, provide an entirely different perspective of mountains.
2. There is an opportunity for more integrated approaches which work across the various natural and human divides. There is no ideal end state or perfect solution, as it is a matter of societal choice within limits imposed by nature.
3. Many mechanisms and processes are available to help identify choices, visions, plans and actions.
4. The chapter is written from the viewpoint of someone working on and walking in many mountain areas of Europe as a geomorphologist, public administrator and environmental advisor.

1. Introduction: positive and negative perspectives on mountains

There are many ecological, environmental, social, cultural and economic reasons why mountain areas should be seen from a positive perspective. Scottish mountains, for example, exhibit variety and distinctiveness of species, habitat, landform and landscape. They have unique ecosystems representing the interaction between alpine, Arctic, and cool temperate systems. They provide many environmental goods and services: clean air, carbon sequestration, fresh and copious supplies of water, and are regulators of precipitation run-off. Mountains, such as Ben Nevis, have iconic status. Their very existence provides an important source of positive interest which can be harnessed to help safeguard, protect and restore them. Mountains have for the last two centuries been regarded as aesthetically pleasing and depicted by Scottish landscape painters, such as Naismyth, Knox, and McCulloch. Mountains have been a source of challenge and recreational pleasure for well over a century epitomised by the listing of summits over 3000 feet in Munro's Tables. And, finally, from a positive perspective, Scotland's mountains have been a source of work and wealth for many centuries.

However, throughout history mountains have been places of conflict. They are manifestations of conflict in nature and barriers to biodiversity. In human timescales, they have been the zones of military and ethnic tension and boundary conflict. Perhaps this is not surprising given their geological origins representing cataclysmic events in the Earth's history. Mountains are also dangerous today because of the highly variable weather within the course of a few hours catching the unwary out through darkness, snow, avalanche, rock fall or other natural phenomenon which endangers human life. In addition, the slopes of many of the mountain areas are steep, the soil is thin, the vegetation hold is tenuous and the precipitation holding capacity of the ground is low. It is therefore easy to understand the growth in the damage to the hills from the pressure of walkers. The mountains of Scotland have a low level of biological productivity because of the combination of acidic base rocks and high precipitation. The mountains of Scotland have been sources of conflict because of ethnic and religious differences and the quest for power. Added to the above effects have been many centuries of misuse and mismanagement which continues today, in particular high levels of grazing and burning, and the removal of native habitats in

favour of introduced species, and monoculture trees. A few large development proposals have been sources of conflict in recent times, most notably, mineral extraction at Rhoneval, Harris and Duntalnich, Breadalbine and the funicular railway at Coire Cas on Cairngorm.

Mountains are also sources of conflict between rural and urban populations, between conservationists and landowners, and between recreationalists and farmers - to name but a few of the dimensions. Two examples will suffice to illustrate the situation. There has been a longstanding battle between those wishing to formally secure access to the hills and mountains of Scotland and those who own the land. The Land Reform (Scotland) Act 2003 provides for access but has not yet led to resolution of the conflicts. Second, there are ongoing disputes between protected area bodies and rural interests. The former, both statutory and charitable bodies, argue that these areas are of national and international significance for their landscapes and wildlife and for the environmental services which they provide to society. The rural interests, representing those who own land, those whose livelihoods are dependent on the land and those who wish to see the area protected for their own interest, argue that there have been generations of good stewardship of the land and the current high status of its wildlife is the result.

Even those who study mountains often only consider them from a specific perspective: aesthetic or cultural or economic, or from the viewpoint of one discipline, such as geology or botany or anthropology. It is easy to understand how the negative values and views on mountains is the centre of attention: academic study and the media often seem to prefer the investigation and exposure of opposites rather than those situations where harmony has been achieved and progress is being made.

Two examples from the writer's personal experience illustrate the variety of perceptions. The active volcano Hekla in south central Iceland is thought as the entrance to Hell in the literary traditions of the Icelanders. It is the setting for Jules Verne's 'Journey to the Centre of the Earth'. It is the source of concern of many Icelanders because its eruptions darken the skies with the clouds of dust and vapour, and cover the surface over a wide area with tephra and kill off the vegetation which in recent years has been encouraged to grow by careful stewardship. But Icelanders visiting the summit with the author have gained a new visual and emotional perspective of the mountains. In many visits to the Scottish hills and mountains the writer has been surprised by widely different views of colleagues. A very significant factor is the individual's training and academic background and the reasons why the hills are important: intellectual (botanist, geomorphologist), financial (sporting estate owner, sheep farmer), health (walker), emotional (local family), and career development (consultant, scientists).

The perspectives of the residents of the Hekla area or of the companions in the Scottish hills cannot be dismissed. Rather the important issue is to respect them and see how they can be used to enrich the lives and the perspectives of others and to bring about a transformation from polarity and division to one of integration and harmony.

2. Resolving conflicts: a diverse package
It would be easy to allow the negative factors of conflict to take control, but there are so many positive attributes of mountains and society's attitude to them and need for

them which can provide the basis of new visions and new ways forward. The essential ingredients for the way forward are to develop shared goals and outcomes and to define an inclusive process engaging all of the stakeholders. Ten different and complementary elements are described.

(i) Building concensus
Experience shows that the process of engaging all relevant stakeholders is critical. The first step is to define who are the interested parties: local residents in the mountains, those in adjacent areas, those who use the areas but reside elsewhere, those representing wider national and international interests, and those wishing to exploit the natural resources of the area. Without such assessment it will be difficult to have the support of all the appropriate and relevant constituencies and the legitimacy of the outcomes will be questioned. Inclusive rather than exclusive approaches are, therefore, necessary.

Both the negative and the positive aspects of mountains have to be considered if there is to be movement from conflict to consensus. Ignoring the negative in the hope that somehow it will disappear or will be resolved is a recipe for disaster. All the models of consensus building and all of the practical experience in mountain areas in many parts of Europe and North America shows this to be the position (see, for example, Lewis, 1996; Poore, 1992; McNeely et al, 1994; Crofts, 2000). Whilst the preference may often be to accentuate the positive and therefore to start with the benefits and the points on which there is likely to be consensus, the model commended by the writer is one which means argument, discomfort and difficulty by exposing the opposites and hammering away at the disagreements before real consensus can be achieved.

Ulysses S. Seal, an American management consultant working in the field of environmental conflict resolution, uses a step-wise progression in 'facilitating sustainable agreements' as follows (Seal, personal communication and author's attendance at IUCN Programme Planning Workshop, Gland, Switzerland, June 1999):
- **business as usual** – familiar opinions on a new topic leading quickly to a decision point;
- **divergent zone** – attempted decision with diverse perspectives with feelings of hope, aliveness, curiosity, relief and thoughtfulness;
- **groan zone** – competing frames of reference leading to confusion, frustration, perplexity, anxiety, aggravation, disgust, boredom and exaggeration;
- **the commitment to struggle** – patience, tolerance and perseverance lead to a shared framework of understanding;
- **convergent zone** – imagination, focus, eagerness, clarity and confidence leading to inclusive alternatives, synthesis and refinements; and ultimately to
- **the closure zone** – the decision point which is shared by all of the parties.

The timescales to progress through all of the stages will vary. Subtle facilitation by an independent person (such as Seal) or leadership by a respected and determined individual (such as Magnus Magnusson in the case of the Cairngorms Working Party) are essential parts of the process. Even then, experience shows that it can at best take months and quite often years to reach the closure zone.

The inclusion of all relevant stakeholders in a meaningful process is a major ingredient of success. In mountain areas restricting involvement to those who are concerned with the natural heritage, or who depend on the area for their livelihood is not sufficient. Inclusive approaches must go way beyond representation by local and

environmental interests, to include those who live styles and social well-being are dependent on mountain areas, particularly those who live in urban areas often many miles from the mountains. Also those who have actual or potential economic interests in the use of mountain resources, such as water, forestry and mining interests need to be part of the process.

Who to include in the process was, for example, a question addressed by Scottish Natural Heritage (SNH) in its consultation on behalf of government on the proposals for national parks. First, SNH undertook a consultation process on the overall proposals and formally reported on the consultation process (SNH, 1999a). More detailed consultations on the proposals for the Loch Lomond and the Trossachs National Park comprising: 11 drop-in surgeries, 5 street surveys, 12 public meetings, 12 partner meetings, 15 interest group meetings, 6 economic focus group interviews, 4 national displays, 3 youth consultations, and 5 primary school discussions (SNH, 2001a). Furthermore, independent consultants undertook an evaluation of the consultation process and the results published (Downie and Forsyth, 2001). This was the most extensive and intensive consultation exercise on a designation ever undertaken in Scotland. The lessons learnt were then applied to consultations on the proposed Cairngorms National Park, resulting in more extensive consultations and again formal, independent reporting on the evaluation. In addition, SNH reported in detailed its findings from the two consultations (SNH, 2001a; SNH, 2001b). The exercises can be regarded as being successful as consultees praised the reporting of the findings and also criticised government when it did not agree with the findings in its own proposals (as reported in the press in late 2002).

In contrast and at the same time, SNH was undertaking consultation on behalf of the UK government on the establishment of a new network of protected areas – Natura 2000 - in the European Union under the EU Habitats and Birds Directives. The European Commission set the timescales. The so-called process of consultation was more appropriately termed factual clarification and explanation as there was little opportunity to change the proposals as the Directives and legal interpretation decreed that they were based on scientific data, and social and economic considerations could not be taken into account. Despite the best efforts of SNH, especially in persuading the government of the need for consultation, there were a number of challenges and the consultation was regarded as a farce in a few locations (as widely reported in the national and local media in Scotland).

The lessons on consultation are clear from these two examples: the consultation must be meaningful, in particular consultees should have the opportunity to have changes made to the proposals, timescales should be long enough especially bearing in mind that many consultees live in dispersed communities and are available only in the evenings and weekends, and that consultation should be done using language and concepts that consultees understand.

(ii) Including local interests
There is often debate amongst local residents about the validity of allowing external interests to be involved when many feel that they have born generations of domination from outside interests. Local people and local communities must be part of any process. But, certainly in Scotland, there are likely to be tensions even among the local residents because there are so many incomers, pejoratively called 'white settlers'. Favouring one group to the exclusion of the other might make progress easier to achieve but it will have very limited chance of durability. International

experience shows that those communities who feel that history has reduced their legitimate rights and removed their share of voice need to have special attention paid to overcoming these problems if progress is to be made.

In many mountain areas communities have a close affinity to the land and have many traditional skills and much traditional knowledge (Lewis, 1996). It is important that this is recognised by the authorities and the knowledge respected and used. In addition, indigenous groups and other stakeholders will benefit from building their capacity to take a full part in decision-making and action programmes, and to recognise that conflicts and negative perceptions take time to be overcome. The general principles and the 29 case studies compiled by IUCN are a very valuable digest covering issues such as human rights, political conflict, hunting and species protection, participation (Lewis, 1996), as well as the 161 guidelines brought together by Duncan Poore and his colleagues covering every conceivable element of managing mountain protected areas (Poore, 1992). Collaborative management programmes are being devised in many countries to achieve the same purposes sought in Scotland's mountains (Borrini-Feyerbend, personal communication) and lessons of success and failure can be learnt.

(iii) Working with diverse land owners
Another important ingredient is the basis on which land is owned and managed. In Scotland's mountain areas there is a diversity of ownership reflecting a range of historical, economic and institutional factors. Private individuals, private trusts, public charitable trusts, communities, the state, state agencies and local government all own land. Although there has been demands for transfer of ownership to organisations with environmental and social stewardship objectives, the basis on which the land is owned and the forms of management which are undertaken are, in the view of the author, more important. Practically, it is unlikely to be politically acceptable to sequester land and proposals for this approach by members of the Scottish Labour Party in the nineties were not take up when the Labour Administration was elected in 1997. An approach argued by the Cairngorms Working Party, for example, was to define responsible stewardship of natural resources (Cairngorms Working Party, 1992). Similar reasoning has been made by SNH and various environmental charities. Codes of sustainable environmental practices and good stewardship have been drawn up (Scottish Executive, 2002) but have yet to be formally adopted. More significantly, compliance with them is not a condition of the receipt of financial support for agriculture from the EU and the government. This is the most important aspect of land management in Scotland's mountains which needs to be tackled given the environmentally damaging practices referred to earlier in this chapter.

Alongside this, it is important to note that areas of land in Scotland's mountains have been purchased in recent by charities whose primary purpose is the maintenance and restoration of biodiversity and landscape. Obvious examples are in the Cairngorms with the purchase of the Abernethy Estate by RSPB and of the Mar Lodge Estate by the National Trust for Scotland, and in the Nevis Range with the purchase of the summit of Ben Nevis by the John Muir Trust. Again, there can be no one solution, but combinations of environment ownership alongside codes of environmental stewardship which have teeth are the key measures.

(iv) Identifying shared benefits
The essence of making progress is to identify the benefits which all of the interests feel they can have a stake in and can share. Ecological interests can readily identify with the need to protect species and habitats but local communities often fail to see the need to place restrictions on traditional activity when that activity, as they see it, has resulted in the quality and diversity of the nature. Gaining recognition, for example, that visitors to the area might be attracted by the iconic species such as the golden eagle and the 12-pointer red deer stag, could be a means of gaining recognition from the local community of the importance of habitat stewardship and the role which they can play. Gaining recognition of the importance of mountain areas for providing clean, fresh water for local communities and for urban areas can be connected to the need for managing grazing and reducing erosion in the headwaters of catchments. Achieving a local sense of pride in the quality of the environment and an 'ownership' of the natural heritage of the area can be difficult to achieve but once local communities feel that they are not being dictated to by unsympathetic outside interests and their own role and that of previous generations becomes recognised, then there is a basis for self-confidence and a building of the connection between the local people and their environment.

Work in relation to proposed national parks in Scotland commissioned by SNH sought to draw lessons and exemplars from elsewhere on the social and economic benefits (see, for example, Dower et al, 1998; Copus et al, 1999) and can form the basis of new alliances in the national parks.

(v) Developing a shared vision
The development of visions and goals for a mountain area is a matter of societal choice. There is no one desirable or best solution and the means of achieving consensus will be an important part of the process of seeking common aspirations, and devising the means of achieving them in practice. The questions which need to be addressed include: what do we want the mountains for, what are their natural attributes which are important for local society and for the communities of interest further afield, can there be shared benefits which meet the needs and aspirations of various interest groups and sector? In Scottish mountain areas, there have been many debates in recent times between different environmental interests and between those interests and local communities.

A visioning process can be carried out to good effect if there is consensus amongst the stakeholders that this would be worthwhile. The sharing of different aspirations and the articulation of a vision helped the work of the Cairngorms Working Party in the early 1990s, in the author's estimation, for the Cairngorms, along the leadership of the chairman Magnus Magnusson (Cairngorms Working Party, 1992). Similarly, SNH undertook its own visioning process for Scotland's hills and moors as part of its Natural Heritage Futures Programme (Crofts, 2003a). Here the vision was one for the natural heritage as this is the organisation's statutory remit; inevitably it was criticised by some consultees for not covering other issues. The outcome was a modified vision to meet the legitimate comments of consultees 'setting out how the natural heritage of Scotland's hills and moors could look based upon sustainable use of natural resources. It is an illustration of a possible scenario…..it is neither a 'Utopia' nor a 'blueprint' but the basis of building a shared vision with all parties with a responsibility for and an interest in the natural heritage of Scotland's hills and moors and a consensus on the way forward' (SNH, 2002a). The efforts of individual bodies, such as SNH, can help to lead the way and to showcase what can be achieved. However, in order to achieve a

more comprehensive and integrated approach it is necessary for all of the stakeholders to work together in preparing a vision.

(vi) Defining the area
Defining the geographical area for discussion is also an important issue. If, for example, local communities are left out of a proposed boundary then they will either be relieved if they have negative perceptions about change or will be annoyed if they consider that an opportunity will be missed. It is reasonable to inform the debate with objective criteria, for example the definition of mountains summarised by Price and others (Price et al, 2002), but too abstract an approach will lead to disillusionment and distancing from the exercise. Perceptions of, for example, where the Cairngorms boundaries are in relation to local communities and to national interests have been an important element in bringing these interests together as evidenced by the criticisms of the Scottish Executive's proposals for the Cairngorms National Park omitting the Angus Glens and Highland Perthshire (Scottish Executive, 2002) by The national trust for Scotland, Perth and Kinross Council, and the establishment of a campaign for the extension of the boundary.

(vii) Broadening protected area perspectives
The majority of mountain areas in Scotland have some form of protected area status: National Park, SSSI, National Nature Reserve, National Scenic Area to name but a few (SNH, 2001c). Different designations have different purposes and differing statutory powers: for example National Nature Reserves are managed for the primacy of nature as agreed between SNH and the owner, Sites of Special Scientific Interest are for the protection of specific scientific features but the arrangements are purely voluntary between SNH and the owner, National Scenic Areas are a consultation mechanism for assessing the impact of development proposals on the landscape and scenic beauty. In many instances, the same area has a number of designations but no mechanism for integrated approaches. Integrated planning, i.e. bringing together all of the components of decision-making which affect an area into a comprehensive single approach, as is provided for under the national parks legislation, is necessary. Whether this will be achieved in practice in Scotland's first two National Parks is a moot point, given that considerable powers still reside with other authorities, and in one case management is almost entirely in the hands of local residents. Some informal examples of integrated approaches in areas not yet considered for national park status has been explored: the Nevis area and in Wester Ross by groups led by The Highland Council.

Allowing different management aims and objectives to be achieved in different parts of a protected area has been used for many years in different parts of the world. The IUCN Protected Area Management Categories (IUCN, 1994) set out the basic principles. The most effective use of these principles in Scotland would be to help define management in different parts of a protected area, distinguishing between high levels of nature protection in some parts, through to facilitating access, and sustainable use of the areas natural resources in other parts (see Crofts, 2003b). The concept of zoning in the new National Parks, as recommended by SNH (SNH, 1999b) but unfortunately not adopted in either the primary or secondary national parks legislation, is founded on these management category ideals. It is hoped that the two authorities will use this approach in the Cairngorms, and the Loch Lomond and the Trossachs National Parks.

Equally important is the need to recognise that protected areas are affected by activities beyond their boundaries and that the protected area management has an effect on the areas beyond the boundaries; this is especially the case with mountain protected areas (Crofts, 2001, 2003b; Crofts and Lahmann, 1998; Phillips, 2000, 2003). There are many tried and tested methods of linking protected areas to the surrounding landscape (Crofts, 2003b provides a review of approaches). They are worthy of application in Scotland's mountains. Adoption of the concepts of bioregional planning in which protected areas are considered as intrinsic parts of a wider functioning bioregion are recommended (Miller, 1996). This is the approach adopted by SNH in its Natural Heritage Futures Programme (SNH, 2002b). The Cairngorms, for example, are part of the Cairngorms Massif and North East Glens biogeographical areas and hence the vision, objectives and action plans for the protected areas are part of those for the rest of the areas. Ecological networks and corridors, for example, have been designed and implemented in mountain areas for example in the Europe Alps and the Meso-America corridor in order to allow better connection between habitats and to facilitate the migration of species. On a smaller scale, some preliminary attempts have been made by SNH in relation to networks and corridors reaching out from the core of the Caledonian pine forest reserves in the Cairngorms. Scaling up these approaches to increase the chances of success of habitat restoration is worth considering. Another approach is the development of Biosphere Reserves under the UNESCO Man and the Biosphere Programme. Rather than being a protected area in the strict nature conservation sense, the Biosphere Reserve concept deliberately sets out to link the core parts of protected areas where there is strict conservation of nature to the wider territory where development occurs, with a series of buffer zones between the core and transitional zones of the reserve. Some of Scotland's mountains, such as Beinn Eighe and Rum, have used an older version of this approach. It is worth considering the merits of the application of the revised approach under the Seville Principles in certain mountain areas such as the Cairngorms and the mountains of Wester Ross which would be particularly suited to this type of approach.

In addition, the contribution of mountain areas to the health of wider ecosystems is increasingly being recognised with the adoption of the Ecosystem Approach by the Convention on Biological Diversity Conference of Parties in 2000 (CBD COP, 2000) and the establishment of 5 Guidelines and 12 Operating Principles. Adoption of this approach in Scotland's mountain areas is recommended as it would reduce the environmental isolation of mountains and gain recognition of their important ecological and environmental functions and ensure that the best practice in including all parties in decision-making processes is achieved.

(viii) Integrating decision making
Decision-making structures and the cultures of bureaucracies are notoriously segmented and divisive (see Crofts, 2000; Crofts and Maltby, 1999). In the Scottish mountains, local authorities are responsible for strategic land use planning and the control of development, SNH for the protection of nature and landscape, enjoyment and education, SEPA for the control and regulation of pollution, Historic Scotland for the protection of built and cultural artefacts, the Forestry Commission for the management of the state forests and for the regulation of private forestry, and the Deer Commission for Scotland for the health and management of deer. In addition, much of the land is owned either by individual, or commercial trusts, or charitable

environmental organisations, or by the state in various guises, plus a little by local communities. Opportunities in the past for achieving an integration of vision and action have therefore been fraught with boundary disputes between the different organisational interests. The opportunity now afforded in Scotland by the establishment of national parks in two mountain areas is, therefore, immense.

The National Parks (Scotland) Act 2000 differs from much equivalent legislation in other industrialised countries (IUCN, 1992) in having a specific socio-economic purpose: 'to promote sustainable economic and social development of the area's communities', in giving the relevant national park authority a statutory duty to develop a national park plan and to periodically review it in consultation with relevant interests 'including the policy for managing the national park, and coordinating the exercise of the authority's functions…. and the functions of other public bodies….so far as affecting the national park' in order to achieve the purpose of the park, and for the democratic election of at least one fifth of the members of the park authority. Although the first two park authorities established in Scotland have not been vested with all of the relevant powers held by public authorities, the statutory powers and responsibilities are greater than for any other authorities dealing with these mountain areas. The tests of success of these parks will, therefore, be the ability to provide a new, wide-ranging and comprehensive vision and plans of action by all of the parties to deliver it, the realisation of benefits to the local communities recognising the environmental quality and environmental functions and services which the mountain areas provide, and the democratic legitimacy of the elected members to represent their constituencies in the context of the overall purposes of the park. It will take some years for the position to clarify and for considered evaluations to be undertaken.

(ix) Providing positive incentives
Providing positive incentives to local communities and to the owners and managers of land can have a very beneficial effect both on the perception of these interests and also on the management of the natural resources. In the past, for example, in the Scottish mountains management for nature conservation on private land has been in the form compensation payments in order to stop activities which damage species and habitats. The negativity of this approach, which is set out in the Wildlife and Countryside Act 1981 and is still in force in Scotland, has created unnecessary conflict and has resulted in less effective use of limited public money. As a result, SNH has trialed positive incentives in the form of payments for active management and provided owners and managers of land with active roles. As a result, for example in the peatlands of Caithness and Sutherland and of Lewis, the take up of the incentives was very high and the resultant change in attitudes towards managing for nature extremely positive (SNH, 2001c). Similarly, providing small grants to local communities and to schools has released energy and secured commitment in local communities (SNH, 2001c). New approaches have been proposed by the Scottish Executive in draft nature conservation legislation (Scottish Executive, 2003), but it at the time of writing it had not been consideration in the Scottish Parliament.

(x) Monitoring and reviewing progress
In any well-designed strategy for mountains, with clearly articulated goals and visions and action programmes to achieve them, it is essential that there are means of monitoring progress and determining whether changes in approach are needed. The establishment of formal monitoring systems, with the identification of key indicators of progress against the goals is necessary. The parameters to measure should be those

which make sense to the stakeholders and can be done with the minimum of resource input for the maximum effect. Formal review processes within the decision-making machinery will need to be established to allow the results of monitoring to be fully considered and recommendations for change made and implemented.

3. The way forward

It should be clear from the arguments and approaches discussed that there are many tools to help in the removal of conflict in Scotland's mountains. No one method will suffice and a combination of the methods set out is necessary if progress is to be achieved. Bringing the various elements for integration and positive environmental management requires recognition of a range of issues.

Watersheds are unifying elements of nature not divides. Traditionally administrative units in the Scottish mountains have been divided along mountain summits, presumably on the basis that these features provide a natural barrier and divide between one homeland territory and another. However, this convenient administrative construct fails to recognise that mountains are home to many species and habitats which do not recognise these artificial divides imposed by society. The challenge for the future is to work across these divides either by instituting new legal instruments and authorities, such as national park authorities, or at the very least by ensuring that existing authorities and their statutory advisers work effectively together to ensure consistency of approach across the divide.

Environmental goods and services provided by mountain areas benefit the whole population. The growth of opinion by local people and local communities that the adjacent mountains are their own backyard and resource reflects a long history of their disenfranchisement. In their newly found desire at the very least to be heard, they do sometimes neglect the fact that mountain areas provide environmental goods and services for the rest of society in the form of clean air, copious supplies of fresh water, and the potential to provide harvestable quantities of food and fibre. It is essential therefore that all of the population recognise that mountains are important environmentally to them and that the owners of land and of natural resources and the authorities responsible for the execution public policy build this into their activities.

The aesthetic, cultural and sacred components of mountains are prime motivators. The less tangible aspects of mountains, such as their aesthetic appeal, the perceived beauty of their scenery and their moods under different weather and light conditions, have great appeal to many people. To some the very existence of mountains, whether they visit them or not, is important. Also there are many cultural associations and often artefacts of previous generation in mountain areas which local communities and those who have associations with the area value. Sometimes there are also long-held sacred beliefs and values about mountain areas. All of these experiential aspects of mountains are motivators of human interest in the past, at present and likely to be so in the future. It is essential; therefore, that full cognisance is taken of them in all strategies, policies and action plans for the area.

Scientific and traditional knowledge are enablers. A great deal of scientific information has been collected about Scotland's mountain areas in recent decades. It is important that this knowledge and information is available to all constituencies in a

form which they can use; intelligibility and physical access are necessary. In addition, in many mountain areas there are traditions and knowledge which is often beneficial for everyone and is held in high regard by long-time resident families. Too often this knowledge and information is lost to later generations and more effort is needed to ensure that this is captured in accessible and durable forms.

Social well-being of and economic benefits for local communities are essentials. The nature conservation and wider environmental agendas in mountain areas have all too often in the past taken precedence over the needs and aspirations of local communities. This has led to feelings of disempowerment and having no say in matters of important to local communities. There is a challenge for both the environmental bodies and local communities here. For the former, it is essential that they consider how to articulate the importance of environmental benefits of mountains to local people and to work with them to determine how natural resources can be used sustainably for the benefit of all. And for the latter, it is equally essential for them to recognise the importance of maintaining environmental systems and processes and regulating resource use within its natural carrying capacity.

4. Conclusion

Much progress has been made in the bringing together the different interests and devising new ways of working to improve the environmental, social and economic well-being of Scotland's mountains and the people which depend upon them. The implementation of national parks in two of the mountain areas offers opportunities for making further progress. None of the processes of engagement between the stakeholders is necessarily easy and time will be required to listen, communicate and share common understanding, visions, goals and actions. The ingredients are available and valuable experience exists in Scotland and in other mountain areas of the world to aid progress.

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