

II. General criteria for the selection of mountain protected areas

The selection of protected areas in the mountains should be related primarily to the sets of values which it is desirable to protect – physical features, biodiversity, catchment characteristics, metaphysical aspects, human cultures and the resources upon which they depend and scenery. But consideration should also be paid to the uses which may be made of these areas based upon their protected status – scientific or cultural studies, sustainable livelihoods, various forms of recreation or, simply, pure enjoyment – for it is the use made of such areas that will convince governments and the public that protection is in the national and public interest. Many of the difficulties of managing mountain protected areas are concerned with establishing the correct balance between protection and use.

There should be protected areas in every mountain range in the world, selected to protect the whole range of features for which mountains are valued and designed to meet various uses. These need to be planned and delineated within a bioregional context which links them to the larger region. Planning must recognise the contextual differences (e.g. ecological, socio-economic, institutional, cultural) of PAs in different places. It must also recognise the common characteristics of mountains (e.g. opportunities for network corridors, altitudinal/latitudinal compensation for climate change) and the unique qualities of mountain environments. All of this implies use of the full range of PA Categories.

Guidelines

Collaboration and communication are basic parts of planning, including capacity building, empowerment, institution building, governance, and protection mechanisms that do not require government ownership.

1. Within each mountain range, it should be the responsibility of the governments which contain parts of it to ensure that protected areas are set up which adequately include the valued biological, physical and cultural variation within their boundaries; though governments do not necessarily have to control the area.
2. Protected areas should be designed using the criteria of reserve design coming out of the science of conservation biology, e.g.
 - larger is better than smaller
 - one unfragmented area of any size is better than many unconnected small areas aggregated to that size
 - buffered is better than no buffer
 - minimum edge or perimeter (rounded or blocky rather than linear)
 - connected is better than disconnected

3. To accommodate climate change in order to protect biodiversity, mountain protected areas should be extended down slopes to the lowlands and, in places, to the sea (Summit-to-Sea).
4. In view of the increasingly critical high-quality water shortage, mountain headwaters are particularly desirable sites for land/water protection.
5. Protected areas should be planned and delineated on a bioregional scale, linked to the surrounding landscape/seascape.
6. Be proactive in finding areas of wilderness which are becoming increasingly valued in an urbanizing, commercializing, frenetic world.
7. Be alert to protection possibilities for private or communal “stewardship lands” which have been long and sustainably managed in farming, ranching and forestry.
8. Select and design with emphasis on the hydrologic unit of the watershed, upstream and downstream, as much as possible.



Mount Chimborazo, Ecuador, is the world’s tallest mountain if measured from the centre of the Earth. It is protected in a Category VI Faunal Production Reserve.

Photo: L. Hamilton