Mountain environments cover about 27% of the Earth’s surface. Many species adapt and specialize in these ecosystems, providing essential goods and services to people living in mountain regions.

**Mountain Biodiversity and Climate Change**

**Climate Change Has Serious Impacts on Mountain Ecosystems** as it causes the retreat and sometimes disappearance of alpine species that become trapped on mountain summits.

In the Alps, some plant species have been migrating upward by one to four metres per decade, and some plants previously found only on mountaintops have disappeared.

During the 20th century, the overall volume of glaciers in Switzerland decreased by 2/3. During that period, Mount Kenya and Mount Kilimanjaro lost 92% and 82% of their ice mass respectively.

In addition, 67% of glaciers are currently retreating at a rapid rate in the Himalayas and the major causal factor has been identified as climate change.

Over 50% of the world’s population is directly dependent on freshwater from the mountains. The shrinking of glaciers modifies the water-holding capacities of mountains, affecting the quantity of freshwater available to both humans and biodiversity.

The conservation of mountain biodiversity is a key option for the adaptation to climate change. Adaptation options include the establishment of additional protected areas, mountain watershed management and the establishment of migration corridors, both horizontal and vertical.