

Abstract

It is very probable that climate change will decrease the reliability of snow-cover. Considering the high sensitivity of winter tourism to snow-deficient winters, climate change would severely affect the tourism industry. This study investigates, how tourists and tourism representatives perceive climate change and how they would adapt.

The snow-reliability of ski resorts was analyzed by way of snow modelling. Two different climate scenarios (ECHAM and CCC) were used as input data for the modelling procedure. Under future climatic conditions, which are expected for the years 2030 - 2050, only ski areas above 1'600 - 2'000 m would still be snow-reliable. This would lower the number of snow-reliable ski areas down to 44% (ski resorts) and to 2% (single T-bars) respectively.

A survey among tourists in ski resorts of the Cantons Ob- and Nidwalden shows that skiers expect severe impacts of climate change on ski tourism already in the next decades. They will respond flexibly to changing snow conditions. During a period of snow-poor seasons, as expected more often under a changing climate, 49% of the skiers would change to a ski resort that is more snow-reliable. 32% of the skiers would ski less often. Technical measures (e.g. artificial snowmaking) and additional offers cannot replace natural snow.

Focus groups were used in order to investigate adaptations of tourism representatives. They perceive climate change in very different ways, however, they draw similar results. Small importance is attached to the issue of climate change and possible impacts are played down. Nevertheless, climate change is used as a major argument for increasing artificial snowmaking and extending into higher areas of the ski fields.

Climate change accelerates current developments in winter tourism. Non-profitable ski resorts will close down whereas ski resorts in higher altitudes stand to gain for the time being. However, focus groups show that tourism representatives prefer forward strategies to adapting to climatic change. Thus, there is a risk that climate change will intensify a ruinous competition in the ski industry.