

Preface

Peter Schuster



“Once in a lifetime” events in swift succession, melting glaciers, thawing permafrost, crumbling peaks, landslides and floods – across all media the Alps have become the subject of disaster news. Avalanches bury settlements, muddy waters wash away dwellings. Even people living outside the Alps can feel that something has changed and continues to change. Scientists are trying to analyse the causes and to use their findings to develop solutions.

Some researchers go further and are looking for what triggers the causes. We know that most glaciers have been rapidly receding since about 1850/1870 and that average temperatures have risen by 2–3 °C during that time. Climate change is faster in the Alps than in the lowlands, but we are still not agreed on the causes of this rise in temperatures. It is still colder here today than it was 5,000 years ago and we have yet to reach the average temperature for our latitude measured across millions of years.

Does this mean that climate change is a natural development? Many scientists disagree and point to industrialisation and motorisation as causes of the so-called “greenhouse effect”. The debate about this issue must go on but should not absorb all energies. Assuming the greenhouse effect is indeed responsible for global warming, then even if we immediately ended all emissions that cause it, we could not stop the rise in temperatures but at most slow it down somewhat. We are well advised to brace ourselves for changes, predict them as accurately as possible and develop adaptation strategies to mitigate negative effects.

The consequences of economic, political and cultural globalisation are every bit as dramatic as those of climate change. Alpine goods, produced and distributed under difficult and expensive production and transport conditions, are up against cut-throat competition from goods made in more favourable locations. Alpine culture is increasingly under attack from global fashions in consumption and leisure activities. Post-modern lifestyles threaten cultural coherence that has evolved over centuries. It is difficult to devise counterstrategies since increasing globalisation means that more and more political agency is being ceded to extra-regional decision-making bodies such as the EU, NATO, the UN, etc.

Yet it is possible to develop such strategies. They must focus on global change as a whole, i.e. both climate change and globalisation. Scientists on their own cannot succeed, a joint effort from researchers, politicians and planners is needed to find solutions that enable sustainable regional development even in mountain areas.

This conference was organised to give an impulse to such efforts. Scientists and politicians, planners and practitioners must come together, if we want to make the Alpine space future-proof. The Austrian Academy of Sciences is keenly involved

in this process. Its Research Unit for Mountain Research: Man and Environment is part of an international network of scientists and practitioners who are working towards analysing the changes with the greatest possible accuracy, developing forecasts and scenarios of developments and finding solutions. The Research Unit expected a wealth of new insights, not just from the speakers but also from the international audience of this conference, and has not been disappointed, as this volume of contributions demonstrates.

Peter Schuster, President of the Austrian Academy of Sciences