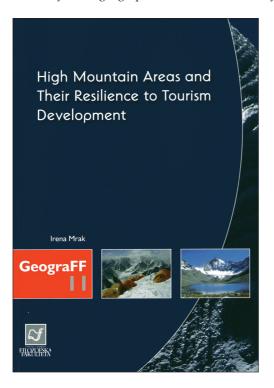
Mrak, I.: High Mountain Areas and Their Resilience to Tourism Development. GeograFF, Ljubljana University Press, 2011, Ljubljana, 168 p.

This is a monograph from the GeograFF series which present primary research achievements of the scientific work of staff at the Department of Geography, Faculty of Arts, University of Ljubljana. In the GeograFF monographs, which are published at the University of Ljubljana (Slovenia), professional explanations of current spatial processes are revealed thoroughly and systematically by experts. The topic of this volume is substantial and upto-date directing attention on the physical and human geographical conditions and tourism in high-mountain areas. The book outlines the characteristics and impacts of adventure tourism and recreation in mountain, especially high-mountain regions.

The author is an assistant professor at the Department of Geography, Faculty of Arts, University of Ljubljana, Slovenia. In Irena MRAK's research projects geographical field works are favourably combined with pastime activities (mountaineering). By her own admission, her greatest passions are mountains and geography, accordingly promoting sustainable mountaineering practices is extremely significant for her. She started to climb in 1995 and since then she has already reached several noteworthy summits of the Alps, the Andes and the Karakoram and become a renowned mountaineer. Her research projects mainly focus on human impacts on the vulnerable high-mountain areas and the resilience of mountain regions to the phenomenon of mountaineering.

Although, the role of mountains in the human societies has changed more than once in history, these geographical features have always been of great significance. Nowadays,



about 12% of the world's population live in these regions. Mountains are the second most popular tourism destinations (following coasts and islands) generating 15–20% of annual global tourism. More and more visitors are attracted to mountain areas, the number of travels is increasing rapidly therefore, extensive researches on human impacts in these vulnerable environments are much required.

The monograph is well-proportioned and consists of five main chapters. Special international literature is adequately treated in the writing and the author is unambiguously aware of the last scientific achievements. In the preface she gives a short but thoughtful geographical definition of mountain and high-mountain areas on the basis of references.

In the first main chapter, an especially important statement is accentuated namely mountain tourism is mass tourism. What is more, mass ski and mountaineering tourism have reached up to high-mountain areas. In spite of the fact that in the last decades travels to mountains has became more common in all seasons, seasonality is still a characteristic of these regions outside Europe. In the chapter it is laid down that in several vulnerable mountainous areas tourism is the most important – often the only – source of income for inhabitants accordingly, priority must be given to those forms of tourism (sustainable ecotourism) which have the least damaging impacts on the natural environment and the local communities. Then high mountain areas of the Alps, Africa, the Americas and the Himalayas are briefly characterised together with the development of mountaineering and trekking.

Forms of tourism and recreation in high mountain areas are described in the second chapter. Although there have been several approaches of this topic, the author tried to give a thorough overview of definitions, forms and characteristics in connection with 'mountain tourism and recreation', 'mountain adventure tourism and recreation' and 'mountaineering' on the score of special international literature. These categories are frequently intertwined since the boundaries between them have become blurred in the last few years. Notwithstanding that, motives of visitors who travel to mountains is diverse, the author focuses on active pastime and adventure since mainly these appear in high mountain areas. One of her important and steady statements is that a mountain tourist is not definitely a "true mountaineer", but may become that. Another essential finding is that tourism trends originating from lifestyle changes have also a remarkable effect on high mountain areas adapting to the needs of modern tourists. Finally, questions of ethics connected to environment, adventure tourism and recreation and mountaineering is laid down in this chapter.

In the third chapter the environmental, social, cultural and economic impacts of tourism and recreation are shortly summarized with special respect on the high mountain areas. Positive and negative impacts are supported by the own experiences and photos of the author. The fourth chapter is an exceedingly important part of the monograph introducing a noteworthy model for the sustainable development of tourism and recreation in high mountain areas. Agreeing with the writer's opinion, the primary goal of the sustainable development of tourism and recreation in high mountain areas should be to maintain the dynamic equilibrium between physical geographic conditions and human pressures. The author gives an adequately detailed description of each step of the model, namely: identification of landscape ecological units (LEU); functional valuation of environmental components and assessment of the carrying capacity of LEUs; analysis of anthropogenic influences and impacts on the high mountain landscape; assessment of vulnerability of the high mountain landscape; perception; planning and implementing the sustainable development of tourism and recreation in mountain areas. The appropriate management of protected territories has a very significant role in this process.

The last chapter brings forward a case study in which the above mentioned model was tested on a certain research spot. The author characterises high mountain areas and their resilience to tourism development on the example of Baltoro Glacier in the region of Gilgit-Baltistan (the Karakoram). The reader can take pleasure in a number of the writer's photos about the splendid landscape of the analysed mountain range. After a brief description of the geographical endowments of central Karakoram the primary research achievements of studying the Baltoro Glacier area (one of the highest regions in the world) with the help of the above mentioned model are introduced. The most important results are based on a severe field work consisting of numerous measures, observations and interviews with inhabitants who participate in tourism and data analysing with special respect on the impacts of tourism. Although more and more experts and residents have been working on to release the negative impacts of tourism, a lot of problems have not been

solved yet. The ecological footprint of expeditions and trekking groups is still considerably large in the surroundings. Since along with agriculture tourism represents a main source of income there, inhabitants wish to welcome as many tourists as possible. Better tourism infrastructure, better educated employees and more marketing are all needed to achieve this goal. Furthermore, it is a protected area (Central Karakoram National Park) without a management that could guide the sustainable development of the area.

The monograph is especially rich in illustrations among of which the numerous photos of the author are really fascinating. Figures are of high value. With this publication she has established a complex and comprehensive ground for determining the main directions of sustainable tourism development in the Baltoro Glacier area. The author's extensive knowledge and responsible thoughts about high mountain areas are unambiguously proven in the writing.

Katalin Szalai