

# Alpenatias—Atlas des Alpes—Atlante delle Alpi—Atlas Alp—Mapping the Alps: Society—Economy— Environment

Author: Price, Martin F.

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Alpenatlas—Atlas des Alpes—Atlante delle Alpi—Atlas Alp—Mapping the Alps: Society— Economy—Environment

Edited by Ulrike Tappeiner, Axel Borsdorf, and Erich Tasser. Heidelberg, Germany: Spektrum, 2008. ix + 278 pp. € 49.95. ISBN 978-3-8274-2004-6.

More detailed information is probably available about the Alps than about any other multinational mountain range on Earth. This book provides a remarkable summary of much of this information, derived primarily from the DIAMONT project, funded by the European Commission. The spatial scope of the atlas is the area to which the Alpine Convention applies (though not including Monaco, which is one of the parties), and it represents the latest stage toward an integrated monitoring and information system, first proposed in the 1990s as a key activity in support of the convention (Price 1999). As indicated by the title of the atlas, the text is written in four Alpine languages—German, French, Italian, and Slovenian—as well as English.

The atlas begins with an introduction that provides a background to its production and the DIAMONT project as a whole, including the methodologies for selecting indicators. These were selected to be relevant to the three "pillars" of sustainability—society, economy, and environment-and had to be measurable and make sense at the municipal level. However, not all desired indicators could be mapped for the entire region because of problems relating to inconsistent definitions and to data that were missing or of inadequate quality or that could not be estimated. Nevertheless, maps on a very wide range of themes were generated. The fact that it was possible to do this shows the very

high availability of such fine-scale data for the Alps; for the mountains of Europe as a whole, it is only possible to map a far smaller number of variables at such a scale (European Commission 2004).

The heart of the atlas is a series of 102 maps of the Alpine area. Each map is complemented by text in the five languages; uses a standard projection and scale, as well as a generally consistent five-class color scale; and, in almost all cases, represents municipality-level data. The maps are grouped into five sections. The first of these is "Background," with maps of biogeographical/physical characteristics, administrative structure, settlement characteristics, and accessibility. The next three sections relate to the three pillars of sustainability: society, economy, and environment. Some of these maps represent single indicators; others compound indicators. Given the incredible range of issues mapped, it is not appropriate to comment on specific maps. Nevertheless, one can note that clear regional differences emerge for some indicators but not others; however, in nearly every case, there are exceptions to general rules. With regard to land covers and uses, it is notable that most of the maps refer to agriculture despite the fact that 45.5% of the Alps is forested (p 217); presumably, the scarcity of maps of forest-related indicators derives from lack of suitable data for the Alps as a whole.

The final section of maps presents "aggregated features," that is, composites of different variables chosen using factor analysis or cluster analysis. While it is usually easy to understand the content of the maps in the preceding sections from the rather brief accompanying text, this is not always the case for this last series of maps. The final map (p 272) shows "regions of similar development," deriving from cluster analysis. There are 8 types, many of which are predominantly in specific parts of the Alps. These include "dynamic rural areas," particularly in Switzerland and stretching over to the South

Tyrol in northern Italy; "rural retreats," especially in the western Italian Alps; "important tourist centres," mainly in central and western Austria; and "traditional agricultural regions," mainly in the southwestern French Alps. Conversely, one finds other types of regions across the Alps: "residential municipalities" close to major urban centers, which are identified as "employment hubs," and "forgotten rural areas" in the southeastern French Alps and in many parts of the Italian, Slovenian, and eastern Austrian Alps.

This book is highly recommended to anyone interested in the Alps or in the possibilities (and challenges) of mapping diverse and complex mountain regions. An atlas at this scale could not be produced for any other multinational mountain range; other recent atlases of the Carpathians (United Nations Environment Programme 2007; also on compact disc) and the Himalaya (Zurick and Pacheco 2006) are at far coarser spatial resolutions and include a significant number of maps of only parts of the mountain range under study. At the same time, it should be recognized that each map in this atlas portrays data from only one point in time, which is valuable and interesting but may not help with long-term planning, for which trend data are more useful (but often bring even further challenges for harmonization). In addition, this is a "traditional" atlas printed (very attractively) on paper. As the editors note, "It would be very useful if the data base and its underlying geographical information system could be represented in an open-access web-based geo information system" (p 25). It is to be hoped that the development of such a system will be supported in the near future by the parties of the Alpine Convention and that it will be continually updated to provide information that is useful for everyone interested in any element of the Alps, whatever their spatial scale of interest. In the meantime, this book provides a benchmark to

which those working in other mountain areas can aspire.

## REFERENCES

**European Commission.** 2004. Mountain Areas in Europe: Analysis of Mountain Areas in EU Member States, Acceding and Other European Countries. Brussels, Belgium: European Commission.

Price MF. 1999. Cooperation in the European Mountains 1: The Alps. Gland, Switzerland: International Union for Conservation of Nature. United Nations Environment Programme. 2007. Carpathians Environmental Outlook. Geneva, Switzerland: United Nations Environment Programme.

Zurick D, Pacheco J. 2006. Illustrated Atlas of the Himalaya. Lexington, Kentucky: University Press of Kentucky.

# **AUTHOR**

# Martin F. Price

martin.price@perth.uhi.ac.uk Centre for Mountain Studies, Perth College UHI, Crieff Road, Perth PH1 2NX, United Kingdom

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