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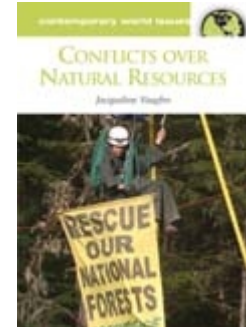
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Conflicts over Natural Resources—A Reference Handbook, by Jacqueline Vaughn, 2007. Contemporary World Issues Series. ABC-CLIO, Inc. Santa Barbara, CA, USA. Order through www.abc-clio.com/products/overview.aspx?productid=110259&viewid=1 Hardcover, xv + 312 pages. Price USD 55.00. ISBN: 978-59884-015-5 (printed); 978-1-59884-016-2 (ebook).



Many natural resources are sediments or derived from sediments. Some of them are carriers of the energy that is essential for our economy and our social structure, which they control to a large degree. Fluctuating prices for oil or gold disturb global markets and consequently affect everybody's life. The rapid decline of the world's economy, which started during 2008 following unprecedented speculations with the hydrocarbon prices, designated new (perhaps not so promising) perspectives for the mining industry. Overexploitation of such resources is a real threat, and the same is true for the all too common overexploitation of living resources, with deforestation as a prime example. Poor management of nature will eventually result in still unclear, but most probably catastrophic consequences. Knowledge of political conflicts, which may easily arise from an increasing demand for ever scarcer natural resources seems therefore a prerequisite for anyone working in the geosciences, and particularly for those who deal with sedimentary ores or fossil fuels. A synthesis of the state-of-the-art of such knowledge is presented in this book by Jacqueline Vaughn, a professor at the Northern Arizona University (USA). Her book deserves attention of all geoscientists.

The book has a somewhat unusual content, which is dictated by its purpose. It includes not only a comprehensive theoretical review of conflicts over natural resources, but also a synopsis of the relevant knowledge. The main text, consisting of three chapters, is short and occupies just one third of the whole book. Vaughn starts with an examination of the history of natural-resources exploitation in the United States. She recognizes six periods, including acquisition, disposal, reservation, custodial management, intensive management, and consultation and conflict.

The next chapter discusses the exploitation of natural resources in the United States in political and environmental contexts. Four aspects are emphasized, namely mineral and hydrocarbon exploration and production, protected areas, management of agricultural areas, and forestry. The establishment of the Office of Surface Mining within the US Department of the Interior, as well as a prescription of environmental costs paid by state and federal funds and reclamation fees from the coal producers, has become a powerful mechanism to reduce the risks posed by the mining activities. Vaughn refers to the so-called Hubbert Peak and suggests a finite state of energy resources as a basis for conflicts. It should be mentioned here that the year of the global Hubbert Peak remains a matter of debate (Al-Husseini 2006, 2009) and that the hydrocarbon resources remain quite large (Burri 2008). The main underlying cause for conflicts may be a limited infrastructure of hydrocarbon production and transportation (Burri 2008). As for the US national-park management, Vaughn emphasizes that problems such as those related to funding and staffing must be solved for a successful management. The number of protected areas increases often as a result of the political agenda, but without a real scientific need. This initiates

a real conflict. I think that recent claims that we should protect “ordinary nature” in addition to “special places” (Doremus 2002)—which sound sensible—will only accelerate this kind of conflict. In other words, not only political misunderstanding of protected-area management, but the real necessity for comprehensive nature protection collides with our possibilities.

The last chapter is devoted to global-scale conflicts, which a focus on diamond and precious metals, hydrocarbons, timber, and water. It is astonishing to read that up to 15% of all diamonds traded annually are illegal. They come from the areas suffering from civil wars and are therefore called “conflict” diamonds or “blood” diamonds. In some cases, the Cold War strengthened conflicts between rebel groups and so, indirectly, contributed to the long survival of the illegal diamond market. Vaughn specifies six reasons why these precious stones play such an important role in these conflicts. The Kimberley Process International Certification Scheme now has become one of the main tools to tackle this illegal trade. Non-governmental organizations may also help. Hydrocarbons initiate two different kind of conflicts: one concerning environmental pollution during their production and transportation, and one concerning political control over energy resources.

The rest of the book contains a lot of useful information, including a highly detailed chronology of events related to natural-resource management. Vaughn reveals the history from 1626 up to now, year-by-year. The next section presents biographies of the key figures in the environmental movement, such as: Bruce Babbitt, who is responsible for the placement of numerous large territories under governmental protection; Julia Hill, who sat for two years on a large tree in California attempting to save old trees in this state; and the Nigerian writer Ken Saro-Wiwa, who struggled against oil pollution in his country. Although all sketches are brief, Vaughn's style of writing is very vivid. She presents then brief reviews of—and extractions from—the most important legal papers (Federal Acts, declarations, and other official documents) that regulate conflicts over natural resources. This makes the book valuable, because the author's discussions are supported by direct evidences from actual environmental practice. Fact sheets demonstrating, for example, US protected areas, gold prices, and oil imports are also important, but the reader should always check for updates. The present-day economic crisis, undoubtedly, is a factor that diminishes our exploitation of the natural resources. Vaughn composed a lengthy list of organizations (both governmental and non-governmental) that deal with the natural resources. Their names, addresses, websites, and brief descriptions of targets and history are given. This is essential information for those who wish to learn more or who want to join the global environmental movement. Geologists may be interested to visit the websites of the Independent Petroleum Association of America or the Office of Fossil Energy.

Although reference lists form part of each chapter, Vaughn spent much time to compose a very informative synopsis of the present literature, video material, etc. Each item is annotated by the author. What could be more informative? But the transfer of all this knowledge to potential readers was apparently not enough for her. She also prepared a glossary, where many terms and abbreviations are explained. Although some are simplified, the degree of such a simplification is not so large; it matches the average knowledge of the envisaged readership.

When judging a book about natural resources, each professional geologist or ecologist will have some questions. The judgement about the value and usefulness of the book obviously depends strongly on the answers. Does this book provide a scientific analysis or is it just an environmentalist claim? There can be no doubt: Vaughn gives us a good example of a scientific approach. But is the science of this book politics-dependent or is it based in depth on geoscience views? Undoubtedly, the book is political in all means. However, the various geoscience subjects are neither too much simplified, nor misunderstood; they are rather explained in a simple mode, clear for both specialists in geology or ecology and non-specialists and amateur naturalists. A third question regards the purpose of the book. Can it serve as some kind of logically structured textbook that one can read from one chapter to another, or is it a reference work? Well, Vaughn is such a talented writer that her book serves well for both purposes. Is there anything lacking in the book? It seems that no obvious omissions are present, but I would have liked to read more about the general theory of political conflicts.

Vaughn has written a book for everyone. It will be very interesting for all specialists in geology, geography, and ecology. The author provides a comprehensive, concise and balanced picture of what political factors play a role concerning natural resources, and vice versa. Theoretical considerations are always supported by extensive examples. Although much attention is paid to US practice, this book may serve as well as a representative example of national-scale conflict analysis, which can be applied to any other country. Moreover, global problems are not omitted.

But why should an average geologist read this book? My answer is simple: besides a clear understanding of how we exploit the Earth, both at the surface and from the interior, we need to understand the general political consequences of our activity. And the book shows that these consequences are much more interesting than most earth scientists would expect. Every reader will be fascinated by the joint adventure with Vaughn in the world of “blood” diamonds, Arctic oil, and “old-grown” forest protection. This book may even help to clarify how your own earth-scientific activities interact with the environment. I found this book enjoyable, enriching, and stimulating reading, and I recommend it to every colleague.

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