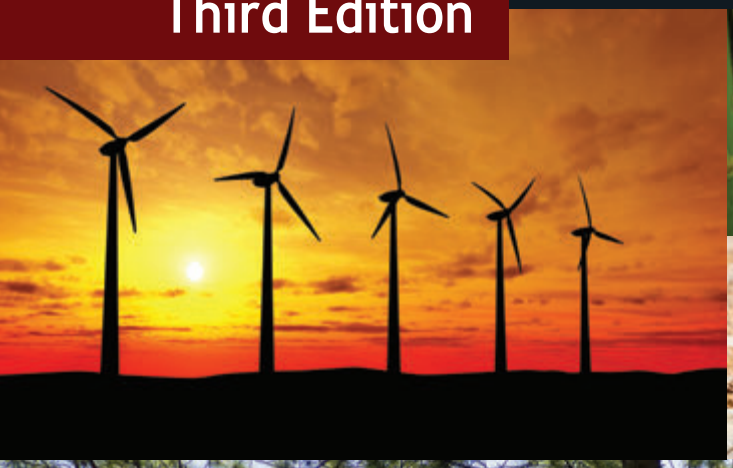
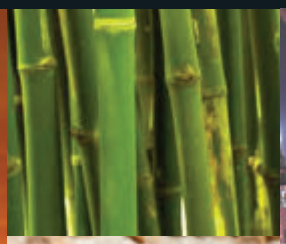
Environmental and Natural Resource Economics

A Contemporary Approach

Third Edition





Jonathan M. Harris and **Brian Roach**

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Note to the Reader

Key Terms are bolded in the text, with a sidebar definition.

All Key Terms in a chapter are listed at the end of the chapter, and the definitions are collected in the Glossary, noting the chapters in which they appear.

Preface to the Third Edition

The third edition of *Environmental and Natural Resource Economics: A Contemporary Approach* maintains its essential focus on making environmental issues accessible to a broad range of students. The text is a product of twenty years of teaching environmental and natural resource economics at the undergraduate and graduate levels. It reflects the conviction that environmental issues are of fundamental importance and that a broad approach to understanding the relationship of the human economy and the natural world is essential.

Typically, students come to an environmental economics course with an awareness that environmental problems are serious and that local, national, and global policy solutions are needed. Some students may be interested in careers in environmental policy; others in gaining an understanding of issues that are likely to be relevant in their careers, personal lives, and communities. In either case, the current importance of the topics gives the course a special spark of enthusiasm that is a heaven-sent boon to any instructor trying to breathe life into marginal cost and benefit curves.

There is a distinct danger, however, that this initial enthusiasm can be dampened rather quickly by the use of a strictly conventional approach to environmental economics. One major limitation of this approach is its almost exclusive use of neoclassical microeconomic techniques. The standard microeconomic perspective strongly implies that anything of importance can be expressed in terms of price—even though many important environmental functions cannot be fully captured in dollar terms. Also, this perspective makes it difficult to focus on the inherently "macro" environmental issues such as global climate change, ocean pollution, ozone depletion, population growth, and global carbon, nitrogen, and water cycles.

For these reasons, the authors have developed an alternative approach that draws on the broader perspective that has come to be known as ecological economics, in addition to presenting standard economic theory. In our view, these two approaches are complementary rather than in conflict. Many elements of standard microeconomic analysis are essential for analyzing resource and environmental issues. At the same time, it is important to recognize the limitations of a strictly cost-benefit approach and to introduce ecological and biophysical perspectives on the interactions of human and natural systems.