

## Preface

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In 1993, the United Nations Statistical Division published a handbook, *Integrated Environmental and Economic Accounting*, and there has been much progress on environmental accounting since then. Many industrialized countries have compiled environmental accounts, but the experience has been more limited in developing countries. The purpose of this book is to show how environmental accounts have actually been implemented and can influence policy in developing countries, based on case studies from southern Africa. The case studies focus on Namibia, Botswana and South Africa, the core countries in a unique regional programme to develop environmental accounts that has been under way since 1995.

The regional programme grew out of a recognition in southern Africa that resource constraints pose an increasing challenge to economic development, that economic principles are increasingly important for sustainable resource management, and that decision-making in the past has often not been grounded in economic assessment of the availability and quality of natural resources. A framework for information and integrated environmental-economic policy analysis was needed to support sustainable natural resource management, and environmental accounts provide such a framework.

In response to the recognized need for environmental accounts, discussions were held with stakeholders in southern Africa in 1993–94, and a three-phase, long-term strategy was designed for building environmental accounts throughout the region. In the first phase of the project, 1995 to 1997, environmental accounts were introduced at a demonstration site, Namibia, in order to test the feasibility of constructing these accounts and the usefulness of the accounts for policy makers. The combination of accounts compilation and policy analysis was to characterize all future work on environmental accounting in the region. This pioneering effort was accompanied by outreach to other countries in the region.

Under the direction of eight government and non-governmental organizations in Botswana, Namibia, South Africa and Swaziland, the second phase began in 1998 and ran for more than three years until 2001. Environmental accounts were constructed for two additional countries in the region (Botswana and South Africa); an accounting framework was developed for regional, transboundary resource management issues; technical training and outreach in the region was greatly expanded, and the groundwork was laid

to establish a regional institution capable of supporting this work in the longer term. This last objective was achieved in 1999 with the establishment of the Centre for Environment and Economic Policy in Africa (CEEPA) at the University of Pretoria, under the directorship of Professor Rashid Hassan.

The regional approach to environmental accounting has had several distinct advantages. First, it facilitated the development of a common methodology for data compilation and analysis that ensures comparability across countries. This can be clearly seen in Chapters 2 and 5, dealing with minerals and water in all three countries. The regional approach also facilitated the application of the accounting approach to economic evaluation of transboundary resources such as water. Finally, there have been clear economies of scale in regional cooperation for training and capacity building.

The third phase of this initiative would expand environmental accounting to several other countries in east and southern Africa; further develop environmental accounting as a tool for transboundary resource management in key areas such as water, wildlife and tourism; and advance policy initiatives based on environmental accounts. Some of the results are presented in this book, but much work remains to be done in the area of policy analysis and indicators, particularly monetary valuation.

This book attempts to bring together much of the work that has been done on environmental accounting in southern Africa. Reflecting the spirit of the regional initiative, the chapters integrate both construction of the accounts and policy analysis. Water is a particularly important issue for southern Africa and was a major focus of the accounting work. Only a small portion of the work could be reported here; a more comprehensive reporting of the water accounts, including monetary valuation, will be published in a future volume.

The work presented in this book is the result of a vast collaboration among many people, those within the three countries where the work has been carried out, as well as our many advisors and supporters throughout the world. We would like to thank our collaborators, especially the late Professor Glenn T. Magagula. Professor Magagula was one of the founding members of the regional steering committee that initiated the southern Africa environmental accounting project. Professor Magagula passed away while he was serving as a member of the steering committee. He held the position of the Vice-Chancellor of the University of Swaziland at that time after having worked as the Deputy Director of the African Development Bank for five years. He devoted his life to supporting capacity building in African professionals in the fields of agricultural and natural resource economics. His wisdom and guidance have been sorely missed.

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