Science Makes the World Go Round

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Successful Scientific Knowledge Transfer
for the Environment

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*To Christian Smoliner,
the most innovative Chief Science
Administrator in Vienna, Austria*

Preface

There is a consensus that, when scientific ideas are put into practice, they should contribute to the improvement of environmental solutions. However, although the transfer of scientific knowledge into practice has been the object of many activities, results are poor, and seldom has better science led to better policy.

Three decades ago, we approached the issue of knowledge transfer by consulting and evaluating the Austrian Cultural Landscape Programme, which was one of the first in Europe to conduct transdisciplinary research in an effort to make a difference in the practice of the sustainable use of landscapes. We learned that most of the expectations scientists had about political actors were not met, and that, conversely, political actors did not acquire the information they expected from science. Nevertheless, a few success stories showed that a valuable scientific contribution to practical solutions is not impossible. We analysed the success stories based on political science theory and identified various success factors. By advising the German Federal Environment Agency, one of the key players in Europe in environmental policy support, we had the chance to develop our model further and to generate the RIU (research, integration and utilization) model, which provided the basis for this book.

Today, the RIU model has proved to be useful in the identification of the key factors involved in the transfer of scientific knowledge in European and international cases. Consideration of these factors allows the development of a road map for the professionalization of the scientific support for policy. The RIU model is not an attempt to diminish the importance of numerous innovative institutions and activities involved in the transfer of scientific knowledge from theory to practice, or to substitute them. On the contrary, in that the RIU model presents a professional approach to the identification of key factors involved in knowledge transfer within the spectrum of existing institutions and activities. One hopes that the ability to focus on said factors might improve the effectiveness of those efforts, which are growing rapidly in number. This could even lead to a new profession, one of “integrators”: people who build bridges successfully between researchers and political actors.

We want to thank all scientists who have trusted us and given us deep insights into their daily business of research, and into the—often frustrating—efforts to make science relevant for practice. We also thank the political actors who shared with us their experiences in the struggle for solutions for environmental issues. Special thanks also go to the editors at Springer, who were enthusiastic about our topic and who made possible the production of this book.

Göttingen
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Michael Böcher
Max Krott

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We wish to thank all interviewees for providing us with deep insight into their daily business as it covered research, integration and utilization. We also thank our colleagues for helping us improve our RIU model of scientific knowledge transfer through their criticism and discussion, especially the working group for scientific knowledge transfer at the Chair of Forest and Nature Conservation Policy at the Georg-August-University of Göttingen, Germany, namely Budi Dharmawan, Janina Heim, Do Thi Huong and Kenji Nagasaka.

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