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Arie S. Issar (Ed.)

# Progressive Development

To Mitigate the Negative Impact of Global  
Warming on the Semi-arid Regions

 Springer

*Editor*

Arie S. Issar  
Ben Gurion University of the Negev  
J. Blaustein Institutes for Desert Research  
Sede Boker Campus 84990, Israel  
issar@bgu.ac.il

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*This book is dedicated to the memory of Professor Hugues Faure (1928–2003), a pioneer in many fields of science, a friend and a partner in developing the idea of utilization of fossil water found under the deserts.*

*Hugues Faure was among the first scientists to investigate the impact of Quaternary climate changes on the ground water resources of the Sahara. In this connection, he was the first to discover and investigate the paleo-lakes of the Sahara. In 1968, he was appointed Professor at the Pierre and Marie Curie University of Paris. In 1969, he served as President of the Technical Committee of Geology at ORSTOM (“Office de la Recherche Scientifique d’Outre-Mer”) and in 1970 he became Director of the Laboratory for Quaternary Geology (LGQ). From 1982 to 1987, he served as President of the International Union for Quaternary Research (INQUA). All these activities in the cause of national and international science organizations did not impede his creative and incessant research and teaching in the field of Quaternary geology with special emphasize on the study of the carbon cycle during the Last Glacial Maximum (LGM) and the Holocene Epoch.*

*Let his memory be blessed*



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# Contributors

**Eilon Adar** Zuckerberg Institute for Water Research, Blaustein Institute for Desert Research, Ben-Gurion University of the Negev, Sede Boker Campus 84990, Israel, eilon@bgu.ac.il

**Menakhem Ben-Yami** Fisheries Adviser, 18 A.Penn St., 69641 Tel Aviv, Israel, benyami@actcom.net.il

**Hendrike Helbron** Department of Environmental Resources, UNESCO-IHE, PO Box 3015, 2601 DA Delft, The Netherlands, hendrike22@yahoo.com

**Arie S. Issar** Ben Gurion University of the Negev, J. Blaustein Institutes for Desert Research, Sede Boker Campus 84990, Israel, issar@bgu.ac.il

**Bernhard Lucke** c/o Prof. Dr. Rupert Baeumler, FAU Erlangen-Nuernberg, Institute of Geography, Kochstr. 4/4, 91054 Erlangen, Germany, lucke@web.de

**Amir Neori** Israel Oceanographic & Limnological Research Ltd., National Center for Mariculture, Eilat 88112, Israel, aneori@gmail.com

**Iourii Nikolskii** Colegio de Postgraduados, Campus Montecillo, Mexico, nikolski@colpos.mx

**Dmytro Palekhov** BTU Cottbus, Department of Environmental Planning, PO Box 101344, 03013 Cottbus, Germany, dmitry\_pal@mail.ru

# **Part I**

## **Progressive Development – Human Society Can Mitigate the Negative Impacts of Aridization Due to Global Warming**

### **General Introduction**

This book joins the list of books authored, edited and co-authored by Arie S. Issar. These books, in addition to the articles by the same author, reported the investigations carried out on the impact of climate changes on the hydrological cycle of the semi-arid regions of our globe. The general conclusions from all these investigations were that during the history of these regions, periods of warm climates had a negative impact on their hydrological cycle. The principle, “The Past is the Key to the Future”, prompted the series of investigations, which concentrated on the detailed study of the Circum-Mediterranean region focusing on Middle East.