

Preface

It is a unique feature that a small country like Lebanon is endowed with ten rivers spread across its territory. These sources of surface water are supposed to be the lifeline of Lebanon, and so, ideally, complaints about water supply should not exist. It is also a common feature that water resources, such as rivers, are geographic localities where people are interested in settling. However, it is a paradox that people in Lebanon are evacuating the settlements nearby these rivers. One such case is that of the Litani River, the largest of its type in Lebanon, and it is no exaggeration to say that the Litani River has become a channel transporting poison between different villages and cities located in its basin. Along the river course, there are tremendous accumulations of solid wastes, sewage and industrial outfalls as well as intolerant smell.

Thus, two major aspects of challenges are pronounced in the Litani River Basin. These are the natural, as represented by the changing and variability of climatic conditions, and the anthropogenic challenges as viewed from the negative human interference, affecting water quality and quantity. Sadly, they are causing the “*Death of a River*”.

In the meantime, the number of diseases resulted from the river water contamination has dramatically increased and the river has become a network of connected black swamps; so, it is axiomatic to ask: *Is there still time to treat the grave situation of the Litani River? Who are the polluters? Have they been identified? What actions have the government taken to rescue the inhabitants?*

Since the early 1950s, there have been many studies and projects applied to the river and its basin, but no progress has been noticed, and the deterioration has exacerbated year after year. This situation has been attributed to many reasons, with a special emphasis on the lack of coordination between the concerned stakeholders.

The Lebanese National Council for Scientific Research (CNRS-L) has taken the initiative to publish this book with the cooperation of several Lebanese scientists, as contributing authors, who have acquired expertise through research, management and decision making regarding the Litani River. The authors believe that it is time to convert theories and policies into actions and serious implementations to rescue the river and its local inhabitants.

This book, as it is concerned with the river assessment and challenges, represents a scientifically-based research contribution designed to be readable by stakeholders, decision makers, students, academics and the public.

The book comprises eleven chapters beginning with a general introduction and the history of the river, followed by an introduction to its natural and anthropogenic setting. Subsequently, the pollution in the river watercourses and the major reservoir of Qaraaoun are discussed in detail. Therefore, challenges on the water resources in the river basin are diagnosed. This is followed by a discussion on the national plan for the river’s remediation, and then the socioeconomic development of the river. The last chapter concludes with the highlights resulted from the previously mentioned chapters.

Appreciations are due to all people and stakeholders who raise the issue of Litani River every day and struggle to rescue the river and mitigate the worsening aspects of the death of a precious/priceless natural resource. We deeply empathize with the inhabitants of the Litani River Basin who suffer from the negative impacts resulted from the abuse of the river.

We extend our thanks to all authors who have contributed to this book with their valuable inputs and did their best to produce this outstanding work.

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