

## CHAPTER 3

# COASTAL LAGOONS: LOST PEARLS OF TÜRKİYE IN THE MEDITERRANEAN COLLAR

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### INTRODUCTION

The regional coastal lagoons of Türkiye were partly to vanish particularly from the early 2000s, mostly attributable to poor management and inefficient cooperative schemes, problematic access to affordable financing schemes, and deficit in required investments; and culminating in observable poverty and socio-economic vulnerabilities. The existing coastal lagoons, too, are considered to remain eventually under a similar threat unless -as an exemplary- an efficient and professional management system is implemented. Coastal lagoons are natural wetlands, being one of the most important areas of fisheries and reservoirs, not only for the coasts of Türkiye, but also for the entire Mediterranean marine ecosystem. Protection and sustainment of coastal lagoons and their fisheries activities are equally and vitally important both for environmental and ecosystem considerations, and economic and social welfare of lagoon fishermen and their families, and inhabitants in proximity.

### ECOLOGICAL IMPORTANCE OF COASTAL LAGOONS

It is common to see non-conformity over respective definitions of a lagoon and an estuary. Being unable to see complete inclusivity or exclusivity of these descriptions, every subject necessarily requires precise definitions in accordance with its aims and scope. To this end, coastal lagoon defined as to be a body of shallow water in terms of a lake or wetland having one or more channel-type connections with open sea; from which itself separated by adjacent sand barriers, and where salty characteristics of connected seawater is measurably diluted with fresh water derived from land drainage (1). Korkut (2), Korkut, Alpbaz (3) Cihaner, Korkut (4) and Emiroğlu, Alpbaz (5) extend this lagoon definition by adding up such characteristics as being a kind of estuary in shallow areas; naturally created through accumulation of sediment and alluvium and separated by natural barriers.

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## CONCLUSION

The experts on coastal lagoon management agreed that traditional extensive aquaculture and artisanal capture fisheries although representing different forms of management are linked by the common use of natural fishing resources. The sustainability of the two sectors depends on the quality of the natural environment and the lagoon ecological conditions. The fact that coastal lagoons provide a refuge for many species, and function as nursery areas and feeding grounds for marine species, implies that these organisms need to satisfy with the optimum conditions of coastal lagoons for a sustainable wildlife. Optimum conditions of the water bodies are highly dependent on the hydraulic management supported by a continuous monitoring inside and outside the lagoon areas. Nearly all scientific studies and reports highlighted the lack of knowledge and the difficulties in collecting information related to the water parameters of coastal lagoons. An accurate and specific prediction of environmental conditions (severe weather and water condition interactions) which have high impact on lagoon infrastructure will guide the lagoon managers to take precautions to minimize the worse effects. Moreover, monitoring water parameters of coastal lagoons related with the fisheries and aquaculture would lead fishermen to increase their capture and venue as well as the biologic productivity of the coastal lagoons.

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