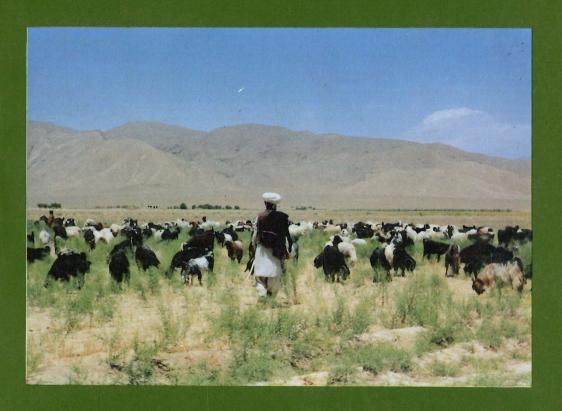
# RANGELAND MANAGEMENT IN PAKISTAN



NOOR MOHAMMAD

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### **Foreword**

Rangelands constitute an important component of the agricultural system in Pakistan. In addition to grazing support for the 93.5 million livestock, the rangelands are a major source of streamflow, natural habitat for wildlife and production of timber and fuelwood. Due to the arid and semi arid environment and limited irrigation facilities, these areas can not be converted into croplands. However this vast natural resource covering over 60 percent area of the country provides great potential for livestock grazing and dry afforestation.

Recognizing the importance of rangelands in the national economy, the Pakistan Agricultural Research Council initiated a National Forage and Pasture Programme in 1975 to establish a range research network in different range ecological zones of Pakistan. It is note worthy that most of the research work reported in this book was made possible by this programme. PARC institutions such as Arid Zone Research Institute (AZRI) and Agricultural Research Institute for Northern Areas (ARINA) also have mandate to enhance productivity of this vast arid and semi arid land resource. Recently, on the recommendations of the National Commission for Agriculture (1988) a Watershed and Aridland Development Authority (WALDA) has been created to further strengthen the research and development activities in the watersheds, rangelands and arid areas of the country.

This book embodies a comprehensive review of the range research and development activities conducted in Pakistan during the past 40 years. It provides innovative guidelines for the scientific management of rangelands. Much information attractively presented in this book provides a useful reference for the research workers, teachers and students. Range and aridland development agencies like WALDA, Sind Arid Zone Development Authority (SAZDA),

I am sincerely thankful to Dr. Amir Muhammed, Chairman, Pakistan Agricultural Research Council for providing me the opportunity to write the manuscript. I also extend special thanks to Dr. G.R. Sandhu, Member (Natural Resources) for his encouragement and recommendation to undertake this study.

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It is my hope that this book will contribute significantly to the understanding of Pakistan's rangelands and prompt scientific management for their sustained productivity.

Islamabad. February 1, 1989

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