

# Feeding and Management of Livestock during Drought and Scarcity

*Editors*

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Livestock during  
Drought and Scarcity**

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# Foreword

Drought has been a frequent phenomenon both in the arid and semiarid regions and livestock has provided the much needed insurance to farmers during these periods of crop failure. However, the last fifty years have witnessed a tremendous rise in both human and livestock population. As a consequence, the nutritional support in the form of fodder and grazing resources has become scarce. This has been further aggravated because the climate change has increased the uncertainty and erraticness of rainfall as well as the intensity and frequency of droughts. These changes can alter both the living pattern and economic condition of dry region dwellers and, therefore, there is need for emphasizing the nutritional management of livestock.

Over the last three decades, livestock sector has grown faster than the crop sector as a whole, which has focused the attention of researchers and planners towards this sector for poverty reduction programs in most developing countries. In India, the growing livestock sector augurs well for the low income households as it leads to augmentation in their income and poverty alleviation. With the changing economic environment, livestock management will assume greater role to meet the growing demand of animal food products.

Although there is enormous possibility of fulfilling the targets of livestock related products in a demand driven economy, improving livestock productivity, its efficiency and quality remains a formidable challenge. Livestock production especially from dry areas, faces very atypical situations of a harsh environment, feed insufficiency both in terms of quantity and quality, and disease prevalence for which fortunately new technological options are now available but also need policy support. The extent to which the small scale farmers of the dry region will be benefited from livestock sector growth would depend on how the policies, technologies and institutions respond to their needs.

It is hoped that this book will provide a basis for the researchers and planners to understand the bottlenecks of animal

production in drier areas and help them devise appropriate policies and programs for more pro-poor livestock sector growth. The contributions in this book have identified various researchable and policy issues for the benefit of farmers and the author need appreciation for highlighting them appropriately with possible technological options.

I congratulate all the authors and editors for bringing out this publication of addressing the issue of livelihood support to benefit livestock owners of the dry areas.



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## Preface

Livestock sector in India presently provides more than 25% of agricultural sector output, whereas it was 16% in 1970-71. The annual rate of increase has been impressive up to 4.3%, higher than the growth in agricultural sector of 2.8%. The livestock assumes greater dependable role in arid and semiarid areas which are frequented by the droughts of moderate to severe nature. However, animals' potential productivity is hampered by perpetuating problems of low quantitative and qualitative nutrition, lack of management efforts, breed degradation and low net returns due to unprofessional approach.

The livestock of this region on which millions of Indian farmers, landless laborers, market agents and their families depend for their livelihoods offer a major challenge and excellent opportunity for achieving economic growth. This can be achieved with the technological advancements and policy support in terms of breed up-gradation, nutritional security, economical management measures and proper health care supports.

The droughts which regularly visit this part of country, need to be addressed with preparedness and sound scientific technologies. The editors of the book were thus specifically requested to contribute towards sharing their experiences in resolving the problems of drought affected livestock and which will also have relevance towards the dry areas as a whole. The chapters of the book have been arranged in four major themes of livestock nutrition technologies, management efforts to address the harsh climatic factors, rejuvenation of scarce, limited resource base and management of health factors for improving productivity. The contribution requested from the experts included the scientists associated with livestock research in institutes located and working for dry areas like Central Arid Zone Research Institute (CAZRI), Central Sheep and Wool Research Institute (CSWRI), Rajasthan Agricultural University (RAU), Central Institute for Research on Buffaloes (CIRB) and Central Sheep Breeding Farm (CSBF). We look forward to get these

inputs transformed into devising appropriate policies and programs for more pro-poor livestock sector growth and support the livelihood of the dry region livestock owners.

The editors are grateful to all authors for acceding to the request for contribution and hope that the book will help the researchers, technocrats and planners to harness potential of the livestock in the region.

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