Rainfed areas have diverse farming systems, different potentials and constraints, which can only be addressed through development and application of location specific technologies. The All India Coordinated Research Project for Dryland Agriculture (AICRPDA) has carried out location specific, adaptive research in a network mode which resulted in development of improved technologies in the areas of rainfed cropping systems, drought management, rainwater conservation, nutrient management and farm mechanization. Some of these technologies have already formed part of the package of practices for crops in different States. However, in view of the increasing importance of rainfed agriculture and the need for boosting productivity, information on the potential of improved technologies and possible means of upscaling has to be made available to a wide spectrum of stakeholders like technical and administrative personnel of Central and State ministries dealing with dryland farming, extension officers, NGOs and farmers. Towards this objective, we have decided to compile the most promising technologies in the above thrust areas, which can increase production, decrease cost of cultivation, reduce drudgery and enable farmers to complete farm operations timely, which is the essence of dryland agriculture.

I compliment Dr.P. K. Mishra, Project Coordinator (Dryland Research), Dr. G. Ravindra Chary, Dr. G.R. Maruthi Sankar, Dr.G. Subba Reddy (former Project Coordinator, Dryland Research) and all the contributing scientists for their effort in compiling this publication. In order to accommodate more number of technologies from diverse agroclimatic regions, only a brief of the technology profile is given in this book. More details on the actual technology can be obtained from the respective chief scientists in the State Agricultural Universities. I hope this publication will be quite useful to all the stakeholders mentioned above. The direct and indirect contributions from all those including farmers involved in developing, testing, demonstrations and popularizing these technologies are duly acknowledged.

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