Conceptual Agricultural Meteorology



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Preface

Agricultural meteorology is an applied science and multidisciplinary in nature. It has a well defined approach in theory and applications. Agricultural Meteorology integrates knowledge from a variety of scientific disciplines in order to determine how cropping systems are affected by weather and climate, and how cropping systems themselves affect weather and climate. An agro meteorologist defines all interactions and correlates physical environments to biological responses and applies the acquired and relevant meteorological skills to help farmers for exploiting weather conditions to improve agricultural production both in quality and quantity. The level of education and skills of students is insufficient to cope with new or aggravating problems, and there is a clear need for trained intermediaries who are equipped with services to assist the farming community in effectively dealing with these problems. Effective education in Agricultural Meteorology at the undergraduate level as well as postgraduate level can ensure a continuous stream of well-informed intermediaries to serve the farming community. An expanded curriculum in Agricultural Meteorology is needed to prepare post graduate students to deal effectively with solving current and future agricultural and environmental problems.

The book is structured into various chapters and primarily for the graduate, post graduate students, professionals and the researchers. This book will have wide acceptability due to wide range coverage of contents which is one of the compulsory courses at undergraduate and postgraduate level in all State Universities, Central Universities and Agricultural Universities for all UGC approved program. The authors have consulted several books, research papers and reports in designing, organizing and preparing the script of this book. In this book, attempt has been made to highlight the current status, opportunities and challenges of Agricultural Meteorology science in the light of food securities.

I wish to express my deep sense of gratitude to those who helped directly or indirectly during the preparation of the manuscript of this book. I am much thankful to our co-author Dr. Hemant Kumar, who helped continuously in editing this book. The authors hope that students in the agricultural stream who want to focus their careers in Agricultural meteorology and boosting sustainable agricultural productivity will find great benefit from this book.

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