FARMING SYSTEMS

Issues and Strategies

The present book is the outcome of valuable scientific contribution made by various scientists across the country. This Book has comprehensive coverage of all the issues and strategies related to farming systems and is expected to provide valuable information for research scholars, undergraduate and post graduate students having farming systems course in their curriculum, guide to entrepreneurs, farming community and NGOs. This book contains thirty eight chapters with broad heads covering i) Overview, issue and strategies of farming system research in India ii) IFS based crop diversification, enterprise selection and planning iii) Food and fodder production strategies based on farmers resource base iv) Integrated resource management v) climate change, carbon sequestration and Agroforestry strategies vi) watershed based approach, soil and moisture conservation strategies vii) IPM and weed management strategies in IFS viii) animal health, dairy farming, integrated goat, poultry and fish management through waste recycling ix) post harvest management of crop residues x) Socioeconomic issues and analysis. This book is expected to provide sound knowledge in scientific forum for formulating research plan sand policies in the country for making our agriculture sustainable.



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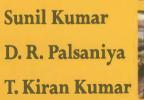
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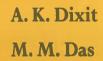
Issues and Strategies











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Farming Systems: Issues and Strategies

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Chapter

Farming System Research in India: An Overview

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Introduction

India is basically an agrarian country with more than 60% population relying on agriculture. Today, India has 1.25 billion people. Ensuing food, nutritional and income security for such a huge population under depleting and degrading natural resources is the tough challenge before the scientist, farmers and policy makers. To make the country self-sufficient in food and nutrition, systematic agricultural research started during 1950. India's agricultural production increased by 5-folds but at the cost of degradation of natural resources. The after effects of green revolution for example are not unknown to the scientists and the government. Also, the agricultural development occurred in well endowed regions and small and marginal farmers got bypassed or were less benefited. Thus to meet the multiple objectives of poverty reduction, food and nutritional security, competitiveness and sustainability, several researchers have recommended the farming systems approach to agricultural research and development. Farming systems research is considered as a powerful tool for natural and human resource management in developing countries including India. This is a multidisciplinary whole-farm approach and very effective in solving the problems of small and marginal farmers. The approach aims at increasing income and employment from small-holdings by integrating various farm enterprises and recycling crop residues and by-products within the farm itself (Behera and Mahapatra, 1999; Singh et al., 2006; Mahapatra, 1994).

In India more than 80% farmers are small and marginal which are hardly economically viable under existing technological scenario.