

Agroforestry for Climate Resilience and Rural Livelihood



Inder Dev Asha Ram Naresh Kumar Ramesh Singh
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Agroforestry for Climate Resilience and Rural Livelihood

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FOREWORD

Agroforestry is a traditional land use system that balances productivity *vis-à-vis* ecological services, thus discussed globally for its relevance in mitigation of climate change impacts. Agroforestry meets almost half of the demand of fuelwood, two-thirds of small timber, 70–80% wood of plywood, 60% raw material for paper pulp and 9–11% of the green fodder requirements, in addition to various environmental benefits. Adoption of agroforestry on large scale thus offers a great potential and appears to be the most desirable strategy for maintaining social, economic and ecological sustainability in the country. At present, 25.32 million ha is under agroforestry, which is about 8.32% of total geographic area of the country. The Task Force on Greening India (Planning Commission, 2001) had further recommended an additional 28 million ha area to be brought under plantation through agroforestry to achieve one-third of the total geographical area of the country under forest cover. To this effect, India is the only South Asian country to have enacted 'National Agroforestry Policy' in the year 2014.

I am sure that this book “**Agroforestry for Climate Resilience and Rural Livelihood**” is an excellent reference for those seeking knowledge on importance of agroforestry providing livelihood and ecosystem services enabling climate resilience. This volume covering novel information on agroforestry will be of immense use to policy makers, planners, scientists, academicians, and students working in the field of agroforestry.

(T. MOHAPATRA)

Dated the 8th January, 2018
New Delhi

Preface

Developing countries mostly rely on agriculture for rural livelihood and food security. Nevertheless, these countries have maximum vulnerability for agricultural production system due to high dependency on rainfall and climate change. On the other hand, land degradation exacerbates the productivity decline. In present scenario, the goal of sustainable development could only be achieved through diversification of existing cropping systems by promoting the integration of trees in different land use systems. Infact, agroforestry is one of the prime options for attaining the target of 33% of forest cover. Apart from nutritional security, agroforestry also provide other benefits like climate change mitigation and adaptation, land tenure security, increased farm income, restoration and maintenance of above and below ground carbon storage capacity, restoration and maintenance of biodiversity, watershed hydrology and soil conservation. Majority of farmers in our country belong to marginal and small category, who struggle every day to meet out their livelihood and to perform the farming practices under the threat of aberrant weather conditions. Thus, it is high time for them to adopt the agroforestry practices to meet out their livelihood requirements and also to sustain productivity with economic security and minimum environmental degradation. This compiled book entitled “Agroforestry for Climate Resilience and Rural Livelihood” would definitely be helpful for policy makers, planners, academicians, students and scientists to suggest the technologies and strategies to the farmers for enhancing their productivity, economic stability, meeting nutritional security under the changing climatic scenario. The voluminous compilation will act as a boost for farmers to adopt agroforestry system in their pursuit for better environmental management and resilience against the climate change. We have segregated the contents of our book under two theme areas, climate resilience and rural livelihood.

We are very thankful to the authors for their contributions in the form of chapters dealing with different aspects of agroforestry, climate change and nutritional security. We are really very pleased to bring this publication by compiling the information received through various experts working in the field of agroforestry and brought number of case studies from different quarters of the country and the issues related to present scenario. The views of the readers on this edition will be highly appreciated for improvement and guidance in future editions.

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