



Reorienting Indian Agriculture Challenges and Opportunities

R.S. Paroda

Trust for Advancement of Agricultural Sciences
(TAAS), India

Despite multiple revolutions, daunting challenges face agriculture. How can it address poverty and hunger, including malnutrition? How much is it responsible for degradation of natural resources (soil, water, agrobiodiversity) and climate change? How can agricultural diversification, secondary and speciality agriculture help in improving productivity, sustainability and farmer income? Can integrated natural resource management (including conservation agriculture, innovative extension, agricultural education and an enabling policy environment) help achieve resilience and faster agricultural growth?

This book sketches a journey from green to an evergreen revolution through reorientation of Indian agriculture to address emerging challenges. It covers global agriculture, genetic resource management, crop breeding including biotechnology, seed production technology, agronomy, innovative extension, motivation of youth (including women), climate change and policy reforms for improving farmers' income. It provides insight into:

- India's agricultural scenario, and the strength of agricultural research for development.
- Better ways of managing natural resources for sustainable farming systems.
- Climate-smart, diversified and resilient agriculture for improved productivity and income.
- The need to reorient research, development and related policies concerned with agricultural research and innovation for development (ARI4D) to harness new opportunities.

This book is for researchers, students and policymakers interested in agricultural policy, increased food production, rural development and natural resource management, especially: general agriculture, genetic resources, crop breeding, seed development, agricultural biotechnology, agronomy, international agriculture, climate change and sustainable agriculture.

November 2018 | 288 pages | HB | 9781786395177 | £100 £80 | €130 €104 | \$165 \$132

sales@cabi.org

KNOWLEDGE FOR LIFE

Contents

Part I Agricultural Scenario

1. The Indian Agricultural Scenario
2. Agriculture for Achieving Sustainable Development Goals

Part II Revolutions in Agriculture

3. Fifty Years of the Green Revolution and Beyond
4. Intensive Efforts for Food and Nutrition Security
5. The White Revolution and Livestock Production
6. Aquaculture Development and the Blue Revolution

Part III Reorienting Agricultural Research for Innovation

7. Increasing Productivity Growth Rate in Agriculture
8. Reorienting Agricultural Research for Development for Sustainable Agriculture
9. Strategies for Scaling Innovations for Impact on Smallholder Farmers

Part IV Improving Productivity and Production

10. Enhancing Productivity of Foodgrains
11. Horticulture for Food and Nutrition Security
12. Strategies for Enhancing Oilseed Production
13. Accelerating Forage Crop Production

Part V Harnessing Agricultural Biotechnology

14. Agricultural Biotechnology for Food and Nutritional Security

Part VI Managing Plant Genetic Resources

15. The International Treaty – Current Concerns
16. Agrobiodiversity: Dynamic Change Management
17. Managing Agrobiodiversity through Use: Changing Paradigms

Part VII The Role and Growth of the Seed Sector

18. The Growth of the Indian Seed Sector: Challenges and Opportunities
19. Revitalizing the Indian Seed Sector

Part VIII Integrated Natural Resource Management

20. Managing and Improving Soil Health
21. Increasing Water-use Efficiency
22. Agroforestry in India: The Way Forward

Part IX Impact of Climate Change

23. The Impact of Global Climate Change on Agricultural Growth
24. Towards Climate-smart Agriculture

Part X Innovation in Extension

25. Linking Research with Extension for Accelerated Agricultural Growth
26. Empowering Farmers through Innovative Extension Systems

Part XI The Role of Women and Youth

27. Women's Empowerment for Agricultural Development
28. Attracting and Retaining Youth in Agriculture

Part XII Policy Reforms for Accelerated Growth

29. Revitalizing the Indian Agricultural Education System
30. A Strategy for Doubling Farmers' Income
31. Future Challenges and Opportunities in Agriculture
32. Change We Must – But Change is Difficult

Ordering Information

Save 20% with the code CCAB20 through the following channels until 30 June 2019:

For placing purchase order: visit www.cabi.org/bookshop

Or contact Marston Book Services Ltd, 160 Eastern Avenue, Milton Park, Abingdon, OX14 4SB, UK
T: +44 (0)1235 465577 E: direct.orders@marston.co.uk

To receive news and updates on CABI books, eBooks and online resources, please sign up at:

www.cabi.org/bookshop/subscribe