Bridging the Gap: Innovations in Agricultural Extension

Bridging the Gap: Innovations in Agricultural Extension

by

Dr. Surjya Kanta Roy Dr. Sujay Kademani Amandeep Ranjan Fatheen Abrar P. N. Ananda K R



This First Edition published in 2025

© 2025 Renu Publishers, India

Title: Bridging the Gap: Innovations in Agricultural Extension

Authors: Dr. Surjya Kanta Roy, Dr. Sujay Kademani, Amandeep Ranjan,

Fatheen Abrar P. N. and Ananda K R

Description: First edition | Renu Publishers 2025 | Includes bibliographical references

and index.

Identifiers: ISBN 9789392597855 (Print) | 9789392597787 (eBook)

Cover Design: Renu Publishers

All rights reserved. No part of this publication or the information contained herein may be reproduced, adapted, abridged, translated, stored in a retrieval system, computer system, photographic or other systems or transmitted in any form or by any means, electronic, mechanical, by photocopying, recording or otherwise, without written prior permission from the publisher.

Disclaimer: Whereas every effort has been made to avoid errors and omissions, this publication is being sold on the understanding that neither the editors (or authors) nor the publishers nor the printers would be liable in any manner to any person either for an error or for an omission in this publication, or for any action to be taken on the basis of this work. Any inadvertent discrepancy noted may be brought to the attention of the publisher, for rectifying it in future editions, if published.

Trademark Notice: Product or corporate names may be trademarks or registered trademarks, and are used only for identification and explanation without intent to infringe.



Head Office: 90, Sainik Vihar, Mohan Garden, New Delhi, India

Corporate Office: 7/28, Room No. 208/209, Vardaan House, Mahavir Lane, Ansari

Road, Daryagani, New Delhi, India

Branch Office: 216, Flat-GC, Green Park, Narendrapur, Kolkata, India

Tel: 011-23256188, 011-45130562, 9971676330, 9582248909

Email: renupublishers@gmail.com
Website: www.renupublisher.in

Preface

Agriculture is the backbone of the Indian economy, supporting millions of livelihoods while ensuring food security for a growing population. In this dynamic landscape, agricultural extension plays a pivotal role in bridging the gap between scientific research and farmers, enabling them to adopt innovative practices for sustainable and profitable farming. The everevolving challenges ranging from climate change to digital transformation demands a reimagined approach to agricultural extension, incorporating modern tools, inclusive strategies, and multi-stakeholder collaborations.

This book, "Bridging the Gap: Innovations in Agricultural Extension" brings together critical insights into contemporary extension approaches, highlighting key areas that shape the future of agricultural advisory services. The chapters explore diverse themes, including climate-smart agriculture, digital extension, public-private partnerships, gender inclusivity, precision agriculture, and agri-entrepreneurship.

The opening chapter, Climate-Smart Agriculture: An Extension Perspective, delves into the need for climate-resilient farming systems and how extension services can support adaptation strategies. The subsequent chapters examine technology transfer approaches, the role of public-private partnerships in agricultural extension, and strategies to bridge the gender gap in agricultural advisory services. The discussion extends to digital technologies, linking agriculture with nutrition and food security, and the power of data-driven precision agriculture. Finally, the book addresses the importance of promoting agri-entrepreneurship and the evolving competencies required for extension professionals in the modern agricultural landscape.

We believe this book will serve as a valuable resource for students, researchers, policymakers, extension professionals, and all stakeholders involved in agricultural development. It aims to provide a holistic understanding of the challenges and opportunities in agricultural extension while offering innovative strategies to empower farmers and strengthen extension systems.

We express our sincere gratitude to all colleagues, friends, families whose expertise has enriched this compilation. We hope this book fosters meaningful discussions and contributes to the advancement of agricultural extension in India and beyond.

Authors

Dr. Surjya Kanta Roy Dr. Sujay Kademani Amandeep Ranjan, Fatheen Abrar P. N. Ananda K R

Contents

	Preface	v
1.	Climate-smart Agriculture: An Extension Perspective	1
2.	Different Approaches for Delivering Technology from Lab to Land	13
3.	Fostering Public-Private Partnerships in Agricultural Extension	27
4.	Addressing the Gender Gap in Agricultural Extension: Strategies and Initiatives in India	37
5.	Harnessing Digital Technologies for Modern Agriculture	51
6.	Linking Agriculture to Nutrition and Food Security for a Better Future	59
7.	Precision Agriculture Extension: Leveraging Data for Decision-Making	67
8.	Prospects of Agri-Entrepreneurship in India: Innovative Methods to Promote Agri-Entrepreneurs and Its Challenges	77
9.	The Evolving Role of Extension Agents: New Competencies for a Changing Agricultural Landscape	93