Modern Approaches in Agricultural Extension and Rural Development

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Preface

Agriculture is undergoing a profound transformation driven by technological advancement, changing climate conditions, evolving markets, and growing demands for food, nutrition, and sustainability. In this rapidly changing environment, agricultural extension and rural development have moved beyond conventional technology transfer toward more inclusive, participatory, knowledge-based, and digitally enabled approaches.

Modern Approaches in Agricultural Extension and Rural Development brings together contemporary concepts, tools, and practices that are reshaping agricultural advisory services and rural livelihoods. The book highlights the transition from traditional extension models to pluralistic, demand-driven, farmer-centred, and innovation-oriented systems. It explores the growing importance of digital extension, mobile applications, artificial intelligence, remote sensing, agricultural drones, precision agriculture, climate-smart practices, farmer producer organisations, value-chain development, entrepreneurship, and market-oriented advisory services.

Particular emphasis is placed on strengthening communication, knowledge sharing, capacity building, and collaboration among farmers, researchers, extension professionals, private enterprises, policymakers, and other rural stakeholders. The role of women, youth, indigenous knowledge, and local institutions is also important in creating resilient and inclusive rural communities.

This book is intended as a useful resource for students, researchers, extension professionals, development practitioners, policymakers, and agricultural stakeholders. It seeks to connect scientific knowledge with field-level application and encourage innovative thinking for sustainable agricultural growth and improved rural livelihoods.

The ultimate aim is to contribute to an extension system that is responsive, accessible, technology-enabled, participatory, and capable of addressing the emerging challenges and opportunities of modern agriculture.

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Mr. Sujit Majhi
Ms. Sanjeetaa Dhaka
Dr. Himadri Roy
Ms. Prerona Paul

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