



Physiological Perspective on KUB Chicken Production

Enhancing Growth and Reproductive Efficiency

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PREFACE

This book, *Physiological Perspective on KUB Chicken Production: Enhancing Growth and Reproductive Efficiency*, is written as a scientific contribution to the development of sustainable local poultry production systems through a comprehensive biological and physiological approach.

The *Kampung Unggul Balitbangtan* (KUB) chicken represents a strategic national genetic resource developed to enhance productivity while maintaining adaptability to diverse environmental and management conditions. Unlike highly specialized commercial poultry, KUB chickens offer a unique biological model for studying the dynamic interactions between genetics, nutrition, environment, and physiological regulation in real production contexts.

This book systematically discusses the biological foundations of growth and reproduction, the principles of systems biology in animal production, and the application of modelling approaches to analyse and predict production performance. By integrating empirical data, physiological theory, and systems-based analysis, this work aims to provide a holistic understanding of KUB chicken production dynamics, particularly under smallholder and semi-intensive farming systems.

We hope that this book will serve as a valuable reference for students, researchers, academics, practitioners, and policymakers in the fields of biology, animal science, and sustainable agriculture. May this work contribute meaningfully to scientific development, practical innovation, and the strengthening of national food security based on local genetic resources.

Sincerely, The Authors

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